#### Text of Proposed Amendments to Regulation 61-86.1 for Public Comment:

#### **December 13, 2007**

Legend: Highlighted text = new text.

Strikeout text = text being deleted.

Underlined text = existing text was moved.

Highlighted & Underlined = existing text was revised & moved.

Highlighted text = new text added after October 11, 2007 Board meeting.

Highlighted & strikeout = text deleted after October 11, 2007 Board meeting.

Highlighted text = new text added on December 7, 2007.

Highlighted & strikeout = text being deleted on December 7, 2007.

SECTION I. DEFINITIONS shall be revised as follows (note that only definitions whose enumeration was revised, whose meanings were altered, or that were newly added are shown below):

#### SECTION I. DEFINITIONS.

- 3. "Aggressive clearance sampling" A method of sampling which uses electric fan(s), electric leaf blower(s), and other devices to simulate vigorous activity in the abated area while air samples are being collected.
- 4. "AHERA" Regulations developed pursuant to the Asbestos Hazard Emergency Response Act, 40 CFR Part 763, Asbestos Containing Materials in Schools (October 30, 1987).
- 6. "Airlock" A chamber which permits entrance and exit with minimum air movement between a contaminated area and an uncontaminated area, consisting of two doorways protected by two overlapping polyethylene sheets and separated by a sufficient distance such that one passes through one doorway into the chamber, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway. The airlock maintains a pressure differential between the contaminated and uncontaminated areas, thereby further minimizing flow-through contamination further.
- 9. "Amended water" Water to which a surfactant (for example, a non-sudsing detergent) has been added.
- 10. "Area air sampling" Any form of air sampling whereby the sampling device is placed at a stationary location either inside or outside the regulated work area.
- 12. "Asbestos abatement entity" Any individual, partnership, firm, association, corporation, sole proprietorship or other business concern, as well as an employee or member of any governmental, religious, or social organization who that is involved in asbestos abatement.
- 13. "Asbestos project" Any activity associated with abatement including inspection, design, air monitoring, in-place management—or other disturbance of regulated asbestos containing materials (RACM). This also includes demolition of a regulated facility, encapsulation, enclosure, renovation, repair, removal, any disturbance of regulated asbestos containing materials (RACM), and demolition of a regulated facility.
- 14. "Asbestos project design" A written or graphic plan prepared by an accredited project designer specifying how an asbestos abatement project will be performed, which that includes, but is not limited to, scope of work and technical specifications.

- 15. "Asbestos containing material (ACM)" Material containing asbestos of any type, either alone or mixed with other materials, in an amount greater than 4 one percent (1%) as determined by using the method specified in 40 CFR Part 763, Appendix A, Subpart F, Section 1, as amended, or an accepted equivalent. (NOTE: "Appendix A to Subpart F" has been redesignated as, and shall hereinafter be referred to as, "Appendix E to Subpart E" 60 FR 31917, June 19, 1995.)
- 17. "Asbestos training course provider" The person, sole proprietorship, public corporation, or incorporated entity that meets the qualifications of this regulation to provide instruction in any of the specific work practice topics or disciplines, non-work practice topics, and/or hands-on topics in any Department-approved initial and/or refresher training course.
- 18. "Asbestos training course" A Department-approved initial or refresher course in any discipline listed herein (for example, workers, supervisors, management planners, etc.) that meets the specific requirements of this regulation and is acceptable for licensing purposes for qualification of an applicant seeking a license in any of the specific work practice topics or disciplines.
- 19. "Asbestos training course instructor" A Department-approved individual who meets the qualifications, as prescribed in Section XV of this regulation, for who will teaching non-work practice topics, non-work practice topics, and/or for teaching work practice or hands-on topics in any Department-approved specific initial and/or refresher training course and who meets the qualifications of this regulation. for the following work practice disciplines:
  - a. Workers
  - **b.** Supervisors
  - c. Management Planners
  - d. Building Inspectors
  - e. Project Designers
  - f. Operations and Maintenance Workers.
- 20. "ASHARA" Regulations developed pursuant to 40 CFR Part 763, Subpart E, Appendix C Model Accreditation Plan, Asbestos School Hazard Abatement Reauthorization Act (November 28, 1992).
- 23. "Building inspection" An activity undertaken at a facility by a Department-licensed asbestos building inspector to determine the presence and location of regulated and non-regulated asbestos-containing materials (ACM), and to assess the condition of materials identified as ACM. This includes visual or physical examination and bulk sample collection.
- 25. "Category I nonfriable asbestos containing material (ACM)" Nonfriable asbestos or nonfriable asbestos-containing packing, gaskets, and resilient floor covering; and asphalt roofing products containing more greater than 1 one percent (1%) asbestos as determined using the method specified in 40 CFR Part 763, Appendix A E, Subpart F E, Section 1, or an accepted equivalent.
- 26. "Category II nonfriable ACM" Any material that cannot, when dry, be crumbled, pulverized, or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations, excluding Category I nonfriable ACM; and containing more greater than one 1 percent (1%) asbestos as determined using the methods specified in 40 CFR Part 763, Appendix A E, Subpart F E,

Section 1, or an accepted equivalent.

- 27. "Clean room" An uncontaminated area or room, which that is part of the decontamination enclosure system with and that has provisions for storage of street clothing and protective equipment.
- 29. "Commercial labor provider" Any individual, partnership, corporation, or other business concern that is not engaged in an asbestos project but which does provides temporary workers or supervisors to the owner/operator of the project.
- 30. "Consultant" A person licensed by the Department to perform duties related to an asbestos project such as a building inspector, management planner, or project designer.
- 3130. "Contractor" Any individual, partnership, corporation or other business concern that performs asbestos abatement but who is not a permanent employee of the facility owner.
- 3231. "Control measure" Use of amended water, negative pressure differential equipment, encapsulant, high efficiency particulate air filtration device, glove-bag, or other state-of-the-art equipment designed to prevent fiber release into the air.
- 3332. "Critical barrier" At minimum, two independent layers of 6-mil plastic sheeting applied to any opening into a work area in a manner that creates a A leak-tight seal-applied from within the work area to isolate vents, windows, doors, switches, outlets, and any other cavity or opening to the contaminated work area.
- 3433. "Cut" To penetrate with a sharp-edged instrument. This includes sawing, but may not include shearing, slicing, or punching.
- 3534. "Decontamination enclosure system" An enclosed area adjacent and connected to the regulated work area consisting of an equipment room, shower area, and clean room, each separated by airlocks, which that is used for the decontamination of employees, materials, and equipment that are contaminated with asbestos.
- 3635. "Demolition" Wrecking or taking out any load-supporting structural member of a facility together with any related handling operations, or the burning of any regulated facility, or moving of a structure.
- 3736. "Department" The South Carolina Department of Health and Environmental Control.
- 3837. "Electrical generating facility" Any establishment primarily engaged in the generation, transmission and/or distribution of electrical energy for sale.
- 3938. "Emergency operation" A renovation or demolition operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, will present an imminent safety or public health hazard, will cause equipment damage, or will impose an unreasonable financial burden. This term specifically excludes routine equipment maintenance.
- 4039. "Encapsulation" A form of abatement involving the treatment of regulated asbestos-containing material (RACM) with a liquid, which that covers the surface with a protective coating (bridging) or embeds fibers in an adhesive matrix (penetrating) to prevent the release of asbestos fibers.
- 4140. "Enclosure" A form of abatement involving placement of a leak-tight, impermeable, permanent barrier to prevent access to regulated asbestos-containing material and to prevent the release of asbestos

fibers.

- 4241. "EPA" United States Environmental Protection Agency.
- 4342. "Equipment room" A contaminated area or room, which that is part of the decontamination enclosure system with and that has provisions for the storage of contaminated clothing and equipment.
- 43. "Examination date" The date printed on the Departmental Asbestos Abatement License that indicates the date of successful completion of an examination administered upon completion of an asbestos training course.
- 47. "Friable" Refers to ACM, which may, when dry, be crumbled, pulverized, or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations. This also refers to previously non-friable ACM after such material becomes damaged to the extent that when dry, may be can be or has been crumbled, pulverized, or reduced to powder.
- 48. "Friable asbestos containing material" Any material that, when dry, can be or has been crumbled, pulverized, or reduced to powder, and which contains more greater than 1 one percent (1%) asbestos as determined using the method specified in 40 CFR Part 763, Appendix AE, Subpart FE, Section 1, as amended, or an accepted equivalent.
- 49. "Goose Neck" Process for sealing the outer bag by twisting the opening of the bag, folding twisted portion of bag over, and creating a loop. Adequately secure the opening of the bag to the base of the twist, using duct tape.
- 4950. "Glove bag Glovebag" A sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Information on glove bag glovebag installation, equipment and supplies, and work practices is contained in the Occupational Safety and Health Administration's (OSHA's) final rules on occupational exposure to asbestos, 29 CFR 1926.1101 (August 10, 1994), as amended, and any subsequent amendments or editions.
- 5051. "Grind" To reduce to powder or small fragments. Grinding includes mechanical chipping or drilling.
- 5152. "HEPA filter" A high efficiency particulate air filter which that will capture particles with an aerodynamic diameter of 0.3 micrometers with a minimum efficiency of 99.97 percent.
- 53. "Homogeneous Area" Area of surfacing material, thermal system insulation material, or a miscellaneous material that is uniform in color or texture.
- 5254. "HVAC" Heating, ventilation, and air conditioning.
- 5355. "Industrial manufacturing facility" Any establishment whose Standard Industrial Classification code falls within Major Groups 20 through 39, excluding any office space which that is part of such an establishment.
- 5456. "In poor condition" Refers to any ACM where the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.
- 5557. "Installation" Any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of a single owner or operator (or of owners or operators under common control).

- 5658. "Issue date" The date printed on the Departmental Asbestos Abatement License which indicates the date of successful completion of an examination administered upon completion of an asbestos training course a license is issued by the Department.
- 5759. "Leak-tight" Dust, solids, or liquids cannot escape or spill out.
- 5860. "License" A document issued by the Department which that allows an asbestos abatement contractor, building inspector, project designer, management planner, air sampler, supervisor, worker, or other consultant to engage in asbestos projects.
- 5961. "Long-term, in-house contractor" A contractor having a long-term, often multi-year, contractual arrangement with an industrial manufacturing or electrical generating facility to provide construction and maintenance services, including asbestos abatement. The employees of a designated long-term, in-house contractor shall be covered under the group license of the assigned facility.
- 6062. "Management planner" A person licensed in accordance with the requirements of this regulation who interprets inspection reports, conducts hazard assessments of asbestos-containing materials, determines appropriate response actions, develops a schedule for implementing response actions, and prepares written management plans.
- 63. Manometer Instrument for the measurement of gas pressure whose units are represented in inches of water column.
- 6164. "Minor project" A project where 25 or less fewer square or linear feet of regulated asbestos-containing material (RACM) is are removed, or where 10 or less fewer cubic feet of RACM off a facility component is are cleaned up.
- 6265. "Movable object" A structure within the work area that can be easily removed, moved (e.g., chair, desk, etc.).
- 6366. "Negative pressure differential equipment" A portable exhaust system equipped with a HEPA filter.
- 6467. "NESHAP" National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, Subpart M, February 3, 1994, as amended, and any subsequent amendments or editions.
- 6568. "NESHAP project" An asbestos project which involves at least 160 square feet or 260 linear feet of regulated asbestos containing material (RACM), or 35 or more cubic feet of RACM off a facility component such that the area or length could not be measured prior to abatement. If several contemporaneous projects in the same area within the same building being performed by the same contractor are smaller than 160 square or 260 linear feet individually but add up to that amount, then the combination of the smaller projects shall be considered one NESHAP project.
- 6669. "NIOSH" National Institute for Occupational Safety and Health.
- 70. "Non-Industrial Facility"- Any public, private, institutional or governmental entity that does not meet the definition of an electrical generating or industrial manufacturing facility as defined in this regulation.
- 6771. "Operation and maintenance (O&M) activity" The disturbance of regulated asbestos-containing material only when required in the performance of an emergency or routine maintenance activity, which that is not intended solely as asbestos abatement. In no event shall the amount of RACM disturbed exceed

that which can be contained in one glove bag glovebag or 6-mil polyethylene bag which that shall not exceed 60 inches in length and width.

- 72. "O&M Worker" An individual licensed under a facility group license to perform an operation and maintenance activity at that facility.
- 6873. "OSHA" Occupational Safety and Health Administration.
- 6974. "Owner/Operator" Any person or contractor who owns, leases, operates, controls, or supervises a facility being demolished or renovated, or any person who operates, controls, or supervises the demolition or renovation operation, or both.
- 7075. "Owner's representative" A licensed consultant supervisor, management planner, project designer, or air sampler designated by the facility owner to manage the asbestos project, and who serves to ensure that abatement work is completed according to specification and in compliance with all relevant statutes and regulations.
- 7476. "Personal air sampling" A method used to obtain an index of an employee's exposure to airborne fibers. Samples are collected outside the respirator in the worker's breathing zone.
- 7277. "Planned renovation operations" A renovation operation, or a number of such operations, in which some RACM will be disturbed, removed, or stripped within a given period of time, and that can be predicted. Individual non-scheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

#### 73. "Process date" - The date a license is printed by the Department.

- 7478. "Project designer" A person licensed in accordance with the requirements of this regulation who is directly responsible for planning all phases of an asbestos abatement project design from project site preparation through complete disassembly of all abatement area barriers.
- 7579. "Reciprocity" A written agreement between another state and South Carolina to use the same or equivalent auditing criteria when evaluating training course materials, course presentations, and instructor qualifications.
- 80. "Regulated area"- An area established by the owner/operator of an asbestos project to demarcate areas where asbestos abatement activities are conducted; any adjoining area where debris and waste from such asbestos work is stored; and any work area within which airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit.
- 7681. "Regulated asbestos-containing material (RACM)" (a) Friable asbestos-containing material; (b) Category I nonfriable ACM that has become friable; (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, drilling, or abrading; or (d) Category II nonfriable ACM that is likely to become or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations subject to this regulation.
- 7782. "Removal" Taking out RACM or facility components that contain or are covered with RACM from any facility.
- 7883. "Renovation" Altering a facility, or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural

members are wrecked or taken out are demolitions.

- 7984. "Repair" Procedure used to patch, cover or otherwise restore damaged asbestos containing material other than enclosure or encapsulation. Returning damaged asbestos-containing material to an undamaged condition or to an intact state so as to prevent fiber release.
- 8085. "Resilient floor covering" Asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing moregreater than 4 one percent (1%) asbestos as determined using polarized light microscopy according to the method specified in 40 CFR Part 763, Appendix AE, Subpart FE, 40 CFR Part 763, Section 1, Polarized Light Microscopy, or an accepted equivalent.
- 81. "Roofing materials" For the purposes of this regulation, roofing materials shall include but are not limited to: Bituminous built up roofing systems, roofing membranes, asphalt shingles, cement shingles, roofing cements, mastics, coatings, panels, light weight roofing concrete, and flashing.
- 8286. "Shower room" A room located between the clean room and the equipment room in the decontamination enclosure system containing a shower with hot and cold or warm running water controllable at the tap.
- 8387. "Small project" A project where more than 25 but less fewer than 160 square feet or more than 25 but less fewer than 260 linear feet of RACM is are to be abated, or where more than 10 but than less fewer than 35 cubic feet of RACM off a facility component is are to be cleaned up.
- 8488. "Start date" The date printed on the Departmental-issued asbestos abatement project license, which indicates when asbestos renovation or demolition operations, including any abatement activity having the potential to disturb RACM, will begin.
- 8589. "Strip" To remove RACM from any part of a facility or facility component.
- 8690. "Structural member" Any load-supporting member of a facility, such as beams and load-supporting walls; or any non-load-supporting member, such as ceilings and non-load-supporting walls.
- 8791. "Structures per square millimeter" Reporting measure for Transmission Electron Microscopy (TEM) Analysis. TEM clearance requires less fewer than 70 structures per square millimeter (70s/mm<sup>2</sup>).
- 8892. "Surfactant" A chemical wetting agent added to water to improve penetration, such as a non-sudsing detergent.
- 8993. "Supervisor" A person licensed by the Department and designated as the contractor's representative to provide direct on-site supervision and guidance to workers engaged in abatement of RACM.
- 9094. "Temporary Storage License" A license issued by the Department which that authorizes storage of asbestos waste from small and minor projects at a secure location deemed acceptable toby the Department.
- 9195. "Visible emissions" Any emissions which that are visually detectable without the aid of instruments, coming that originate from RACM or asbestos-containing waste material or a regulated work area
- 96. "Variance" Written Departmental approval for the use of alternative work practices at an asbestos

#### project.

- 9297. "Waste generator" Any owner/operator of an asbestos project covered by this regulation whose act or process produces asbestos-containing waste material.
- 9398. "Waste shipment record" The shipping document, required to be originated, prepared, and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.
- 9499. "Wet cleaning" The process of eliminating removing asbestos contamination from facility surfaces and objects by using cloths, mops, or other cleaning tools which that have been dampened with amended water.
- 95100. "Work area" Designated rooms, spaces, or areas in which asbestos abatement activities are to be undertaken, or which that may be contaminated as a result of such abatement activities.
- 96101. "Worker" A person licensed by the Department to perform asbestos abatement under the direct guidance of an accredited and licensed supervisor. However, facility operation and maintenance workers are not required to work under a licensed supervisor.
- 97102. "Working day" Monday through Friday, including holidays that fall on any of the days Monday through Friday.

SECTION II. APPLICABILITY shall be revised to read:

#### SECTION II. APPLICABILITY.

- A. The requirements of this regulation shall apply to: any owner/operator, building inspector, management planner, project designer, contractor, asbestos abatement entity, consultant, air sampler, commercial labor provider, supervisor, or—worker, non-industrial facility owner and/or operator, or demolition contractor involved in the inspection, in-place management, design, removal, encapsulation, enclosure, renovation, repair, demolition, activity, or any other disturbance of RACM; and to any asbestos training course provider or asbestos training course instructor who conducts mandatory asbestos training courses.
- B. There are no size limits for abatement projects involving RACM for which the applicable requirements of this regulation shall not apply unless otherwise specified.
- C. Asbestos projects occurring at private residences of four units or less are exempt from the requirements of this regulation unless performed by a person or persons holding an asbestos abatement license.
- <del>DC.</del> An owner/operator may request that the Department determine whether a project is an asbestos project subject to the requirements of this regulation.
- D. Asbestos projects occurring at a private residential structure of four units or fewer may be exempt from the requirements of this regulation unless:
  - 1. Performed by a person or persons holding an asbestos abatement license.
  - 2. Performed as part of a larger commercial or public project, such as, but not limited to, highway

construction; development of a shopping mall, industrial facility, other private development; or urban renewal, etc.

- 3. The project involves Mmultiple structures within a compact area ("city block") under the ownership and/or control of a single owner and/or operator. Examples would be a municipality clearing a block of houses for urban renewal purposes or SCDOT clearing a row of houses for a highway-right-of-way project.
  - 4. The structure meets the definition of an installation.
  - 5. The residential structure is being burned for fire training.
- 6. The residential structure(s) has previously been used for any commercial purpose including having been used as a rental property.
- E. If asbestos projects occur at <del>non-adjoining</del> separate buildings (different school buildings, for example) then each separate building shall be considered a separate project.

SECTION III. shall be renamed ASBESTOS LICENSE FEE SCHEDULE and revised as follows:

#### SECTION III. LICENSING REQUIREMENTS ASBESTOS LICENSE FEE SCHEDULE.

#### A. Applicability.

- 1. The requirements of this Section shall apply to: any owner/operator, asbestos abatement entity, building inspector, management planner, project designer, contractor, asbestos abatement entity, consultant, air sampler, commercial labor provider, supervisor, worker, non-industrial facility owner and/or operator, demolition contractor involved in the inspection, in-place management, design, removal, renovation, encapsulation, enclosure, repair, clean-up, demolition activity, or any other disturbance of RACM; and any asbestos training course provider or asbestos training course instructor who conducts mandatory asbestos training courses.
- 2. Acceptable methods of payment shall be by check or money order made payable to SCDHEC, by credit card (VISA, MasterCard, or Discover), or cash.
- 3. Each separate building at a multi-building site shall be considered a separate asbestos project, and fees will be assessed for each.

SECTION III.B., formerly known as SECTION III.D., has been moved and revised as follows:

#### **DB.** Personnel Licensing Fees.

- 1. No application will be processed unless accompanied by the required fee.
- 2. Departmental receipt and deposit of fees submitted with an application shall in no way indicate approval of the application or guarantee the issuance of a license.
  - 3. Fees shall not be refunded if a license application is denied per Section VIII.EF.
- 4. Fees for any duplicate original license shall be \$10.00.

5. Fee schedule: Individual license fees are assessed on a per person per discipline basis.
a. Contractor - \$100.00
b. Consultant*Building Inspector - \$100.00
c. Air Sampler - \$100.00
d. Supervisor (Any type) - \$50.00
e. Worker (Any type) - \$10.00
*Consultant includes but is not limited to the following disciplines: building inspector, management planner, and project designer.
6. Facility Operation & Maintenance (O&M) Worker Group License Fee Schedule:
a. The minimum fee for an O&M Worker Group License is \$25.00 and the maximum is \$500.00.
b. Fee Schedule:
(1) #Up to 10 people - \$25.00 minimum fee
(2) 11 to 20 people - \$2.50 per person
(3) 21 to 50 people - \$5.00 per person
(4) 51 to 90 people - \$7.50 person
(5) 91 or more persons - \$500.00 minimum fee
7. Asbestos Training Course License Fees.
a. Fee Schedule
(1) Initial audit for each training course license - \$350.00 per day per course.
(2) Annual license renewal for Department approved training courses \$200.00 per course.
b. Each course license is valid for an entire year, regardless of the number of times the course is taught during the year.
c. Fees shall not be refunded if a training course is denied a license per Section III.F. of this regulation.
d. Failure to pay annual training course license renewal fees may, after a hearing in accordance with the provisions of Section XVIII of this regulation, result in the course license being revoked.

SECTION III.C., formerly known as SECTION IV.I., has been moved and revised as follows:

#### **IC.** Renovation Project Fees.

- 1. The Department shall collect project license fees based on all regulated asbestos containing materials RACM being removed, and for previously non regulated asbestos containing materials ACM rendered regulated by use of destructive removal techniques such as chipping, grinding, sawing, abrading, drilling, or extensive breaking.
- 2. Abatement project fees for regulated asbestos-containing materials (RACM) are calculated at 10 cents per linear, or square, or cubic foot, with a minimum fee of \$25.00 and a maximum fee of \$1,000.00. For RACM off a facility component such that the area or length cannot be measured prior to abatement, a minimum fee of \$25.00 will be assessed.
- 3. The Department shall not issue an abatement project license for a renovation or demolition until all requested information has been submitted and reviewed, and all applicable fees have been paid.
- 4. Fees shall not be refunded for projects for which the Department has issued an asbestos project license.
- 5. An abatement project license which that has been issued shall automatically become invalid if an instrument of payment is returned for insufficient funds.

SECTION III.D, formerly known as SECTION XIII.G., has been moved and revised as follows:

#### **GD. Demolition Project Fees.**

- 1. The Department shall charge a fee of \$50.00 to issue a project license for demolition projects.
- 2. A project license is required for every facility to be demolished, including any facility in which the required building survey indicates there are is no asbestos containing materials ACM present.
- 3. The Department shall not issue a project license for a demolition until all requested information has been submitted and reviewed, and all applicable fees have been paid.
  - 4. Fees shall not be refunded for projects for which the Department has issued a project license.
- 5. A project license that has been issued shall automatically become invalid if an instrument of payment is returned for insufficient funds, and the licensee shall be subject to enforcement action for operation without a valid license.

SECTION IV. shall be renamed PERSONNEL LICENSING REQUIREMENTS and revised as follows:

# SECTION IV. ASBESTOS PROJECTS/GENERAL INFORMATION PERSONNEL LICENSING REQUIREMENTS.

SECTION IV.A., formerly known as SECTION III.A., has been moved and revised as follows:

#### A. Applicability.

1. No person or contractor shall engage in any asbestos project or abatement involving regulated asbestos containing material RACM, or ACM rendered regulated by removal techniques or methods, unless licensed to do so by the Department.

- 2. Every contractor, supervisor, worker, air sampler, project designer, building inspector, or management planner who engages in any asbestos project shall have a current and valid license specific to the duties performed under the license.
- 3. When a person or contractor engaged in an asbestos project performs duties in more than one discipline, a separate license shall be obtained specific for each discipline. However, a management planner may perform the duties of a building inspector, and a supervisor may perform the duties of a worker without having to obtain separate licenses.
- 4. Licenses issued for asbestos projects such as roofing or cementitious pipe and interior or exterior abatement activities will be restricted based on the training qualifications of the applicant.
- <u>54.</u> A license in any discipline shall only be utilized in accordance with the conditions and provisions contained in the license.
- 65. Asbestos training course providers must have a separate license for each initial or refresher training course taught in any specific work practice topic or discipline. Each course license is valid for an entire year, regardless of the number of times the course is taught during the year. When an individual or a company for hire plans to remove RACM, a Department-issued asbestos contractor license must be obtained prior to performing abatement.
- 7. Licenses for asbestos training course providers will be restricted to courses approved by the Department in accordance with the requirements of Section XV of this regulation.
- 8. Each asbestos training course approved and licensed pursuant to this regulation for the first time will be audited and assessed the initial audit fee prescribed in Section III.D.7 of this regulation. Each training course for which renewal of a license is sought will be assessed the annual license renewal fee prescribed in Section III.D.7.
- 9. An asbestos training course must have a current and valid license on the date that it was taught to be acceptable as a basis for documentation that the person receiving the course certificate has completed the requisite training for asbestos accreditation in any specific work practice topic or discipline.

SECTION IV.B., formerly known as SECTION III.B.3., has been moved and revised as follows:

#### **B.** Training Documentation.

- 37. Acceptable documentation of training shall be:
- —a1. An original certificate which is issued by a Department-approved training course provider and which that meets the requirements specified in Section XV.B.7.b. of this regulation; or
- b2. A valid, original license or accreditation (photocopies or telephone facsimile transmissions shall not be accepted) issued by a state with which the Department has a reciprocal arrangement; or
- —e3.A letter verifying successful completion of training, which includes the name, last four digits of social security number, unique certificate number, test score, and printed name and signature of the course instructor and which is sent directly to the Department from the training provider.

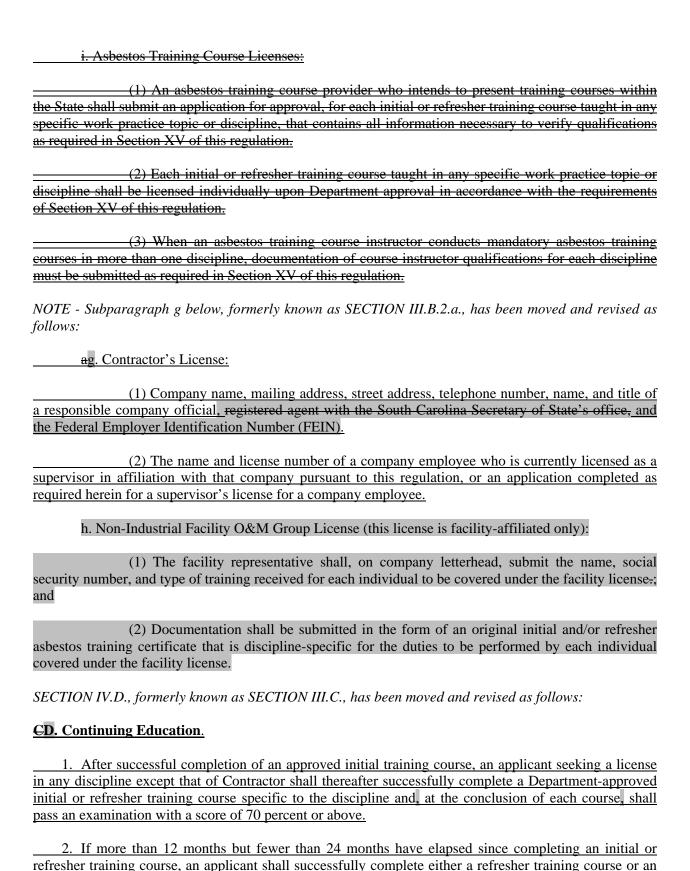
SECTION IV.C., formerly known as SECTION III.B., has been moved and revised as follows:

### **BC.** License Application. 1. Each applicant seeking an asbestos personnel license in any discipline, except that of Contractor, shall: a. Successfully complete a Department-approved initial training course specific to the discipline and, at the conclusion of the course, shall-pass an examination with a score of 70 percent or above. Applicants seeking a license for an asbestos training course in any discipline must submit documentation of qualifications and any other information necessary to meet the criteria for Department approval in accordance with the requirements of Section XV of this regulation. 2. Each applicant seeking a license shall b. Submit a completed application to the Department in a format designated by the Department. e. Submit a color passport photo or have photo taken by the Department. Submit a color passport style photo or have a photo taken by the Department. Digital photos should be at least one mega pixel in resolution. Still photos should be a minimum of 2" x 2" and a maximum of 3" x 5". 2. Each applicant seeking a license shall submit a completed application to the Department in a format designated by the Department. The application must state the type of license for which the application is being made and must include all of the following information: a. Contractor's License: (1) Company name, mailing address, street address, telephone number, and name and title of a responsible company official. (2) The name and license number of a company employee who is currently licensed as a supervisor in affiliation with that company pursuant to this regulation, or an application completed as required herein for a supervisor's license for a company employee. ab. Supervisor's License: (1) Applicant's name, social security number, mailing address, telephone number, and when applicable, company affiliation; and (2) Documentation of successful completion of an initial asbestos abatement five-day supervisor's training courses, as referenced in Section XV or for roofers, Section XI. and all subsequent eight-hour refresher training courses, if applicable. be. AHERA Worker's License: (1) Applicant's name, social security number, mailing address, telephone number, and, when applicable, company affiliation; and (2) Documentation of successful completion of an initial asbestos abatement four-day worker's training courses as provided in Section XV or for roofers, Section XI. and all subsequent eighthour refresher training courses, if applicable.

affiliated only):

d. Facility Operations and Maintenance (O&M) Worker's License (This license is facility-

(1) Applicant's name, social security number, mailing address, telephone number, and
company affiliation; and
(2) Documentation of successful completion of asbestos abatement workers' training
courses as provided in Section XV.
courses as provided in Section 24.
c.e. Air Sampler's License:
(1) Applicant's name, social security number, mailing address, telephone number, and,
when applicable, company affiliation; and
(2) Documentation of successful completion of an initial asbestos abatement five-day
supervisor's training courses as provided in Section XV, or project monitor training whose course
curriculum satisfies the provisions of 40 CFR 763, Appendix C to Subpart E, Asbestos Model
Accreditation Plan (MAP), February 3, 1994, as amended and any subsequent amendments or editions at
the time of licensing and all subsequent eight-hour refresher training courses, if applicable.; and
(3) Documentation of successful completion of NIOSH 582 course or equivalent, or
documentation that the applicant is a Certified Industrial Hygienist.
d. <del>f.</del> Project Designer License:
(1) Applicant's name, social security number, mailing address, telephone number, and,
when applicable, company affiliation; and
(2) Documentation of successful completion of an initial three-day asbestos abatement
project designer's training courses as provided in Section XV. and all subsequent eight-hour refresher
training courses, if applicable, or documentation that the applicant is a Professional Engineer (P.E.).
e.g. Building Inspector's License:
(1) Applicant's name, social security number, mailing address, telephone number, and,
when applicable, company affiliation; and
(2) Documentation of successful completion of an initial three-day asbestos building
inspector's training courses, as provided in Section XV. and all subsequent four-hour refresher training
courses, if applicable.
f.h. Management Planner's License:
(1) Applicant's name, social security number, mailing address, telephone number, and,
when applicable, company affiliation; and
when appreadic, company annuation, and
(2) Documentation of successful completion of an initial three-day asbestos building
inspector's training courses and all subsequent four-hour refresher training courses, if applicable-; and
(2) Decumentation of engagesful completion of an initial two day asherter reconstruction
(3) Documentation of successful completion of an initial two-day asbestos management planners' training courses as provided in Section XV. and all subsequent four-hour refresher training
courses, if applicable.



initial training course.

- 3. If more than 24 months have elapsed since successfully completing an initial or refresher training course, an applicant shall complete an initial training course.
- 4. The Department may require additional initial or refresher training specific to the requirements of this regulation or to air sampling strategies.

The section formerly known as SECTION III.D., which is shown in this document in SECTION IV, has been deleted in its entirety.

#### D. Fees.

- 1. No application will be processed unless accompanied by the required fee.
- 2. Departmental receipt and deposit of fees submitted with an application shall in no way indicate approval of the application or guarantee the issuance of a license.
  - 3. Fees shall not be refunded if a license application is denied per Section III. F.
  - 4. Fees for any duplicate original license shall be \$10.00.
  - 5. Fee schedule: Individual license fees are assessed on a per person per discipline basis.
  - a. Contractor \$ 100.00
    - b. Consultant\* \$ 100.00
      - <u>c. Air Sampler \$ 100.00</u>
    - d. Supervisor (Any type) \$ 50.00
      - e. Worker (Any type) \$ 10.00
- \*Consultant includes but is not limited to the following disciplines: building inspector, management planner, and project designer.
  - 6. Facility Operation & Maintenance (O & M) Group Worker License Fee Schedule:
- a. The minimum fee for an O & M Group Worker License is \$25.00 and the maximum is \$500.00.
  - b. Fee Schedule:

(1) up to 10 people - \$ 25.00 minimum fee
(2) 11 to 20 people - \$ 2.50 per person
(3) 21 to 50 people - \$ 5.00 per person
(4) 51 to 90 people - \$ 7.50 per person
(5) 91 or more persons - \$ 500.00 maximum fee

SECTION IV.E., formerly known as SECTION III.E., has been moved and revised as follows:

#### E. Action on an Application.

- 1. Within 15 calendar days after receiving an application, the Department will acknowledge receipt of the application and notify the applicant of any deficiency in the application. Within 30 calendar days after receiving a completed application, including all additional information requested, the Department will issue a license or deny the application.
- 2. The Department reserves the right to request documentation to verify an applicant's previous training or accreditation in any discipline prior to issuing a license.
- 3. The Department reserves the right to request documentation, including social security numbers, to verify an applicant's identity prior to issuing a license.

SECTION IV.F., formerly known as SECTION III.F., has been moved and revised as follows:

### F. Denial.

1. The Department shall deny an application if it determines that the applicant has not demonstrated the ability to comply with applicable requirements, procedures, and standards established by the:
a. The Department in as per South Carolina Regulation 61-86.1.
b. Chapter 87 of the 1976 South Carolina Code of Laws, as amended.
c. The U. S. Environmental Protection Agency in as per:
(1) National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M, as amended, and any subsequent amendments and editions.
(2) Asbestos-Containing Materials in Schools, 40 CFR Part 763, Subpart E, as amended, and any subsequent amendments and editions.
d. Occupational Safety and Health Administration in 29 CFR Part 1926.1101 and 1910.1001, as amended, and any subsequent amendments and editions.
2. The Department shall deny a license to any applicant who has failed to comply with the requirements of a properly issued consent, administrative, or judicial order initiated by the Department.
3. The Department shall deny a license to any applicant if it determines that any information or documentation, including a social security number, required by this regulation is fraudulent or has been altered or falsified.
4. The Department shall deny a license to any applicant who fails to remit applicable fees.
5. The Department shall deny a license to any applicant who submits fraudulent or falsified information or documents.
6. The Department will not return fees submitted with any invalid or falsified training and/or identification documents submitted for the purposes of licensing.
57. The Department shall send notification of the denial of an application by certified mail, unless the individual is present when the application is evaluated, in which case the Department will inform the applicant in person of the denial.
68. Reapplication after denial. An application denied per this Section shall be resubmitted as follows:
a. For failure to comply with the requirements of a properly issued consent, administrative, or judicial order initiated by the Department, the application shall not be considered until the applicant complies with said order.
b. For altered or falsified documents, including but not limited to, training certificates, social security cards or numbers, and photo IDs, the application shall not be considered by the Department prior to for 180 days after receipt of such documents and will only then be considered thereafter with proper proof of the applicant having successfully completed an initial course in the discipline in which licensure is sought.

- c. For failure to remit applicable fees, the application shall not be considered until all applicable fees have been received.
- 79. The applicant may request a hearing pursuant to the provisions SectionXVIII of this regulation.

SECTION IV.G., formerly known as SECTION III.G., has been moved.

**G.** Conditions and Generic Alternatives. In granting a license, the Department may impose reasonable terms and conditions to ensure continuous compliance with the requirements of this regulation.

SECTION IV.H., formerly known as SECTION III.H., has been moved and revised as follows:

#### **H.** Duration of Licenses.

- 1. A license shall automatically become invalid if an instrument of payment is returned for insufficient funds.
- 2. A Contractor's license shall expire one year from the process issue date, unless the Department suspends or revokes the license at an earlier date. A Contractor's license shall be considered invalid unless at least one company employee maintains a current, company-affiliated supervisor's license pursuant to this regulation.
- 3. All other licenses shall expire one year from the examination date printed on the license, which is based on the most recent acceptable training certificate submitted with the application, unless the Department suspends or revokes the license at an earlier date.
- 4. No license shall be extended beyond its expiration date.

SECTION V., formerly known as Section IV. ASBESTOS PROJECTS/GENERAL INFORMATION, has been moved and revised as follows:

#### SECTION V. NESHAP PROJECTASBESTOS PROJECTS/GENERAL INFORMATION.

SECTION V.A., formerly known as SECTION IV.A., has been moved and revised as follows:

#### A. Applicability.

Herequirements of this Section shall apply to the owner/operator, building inspector, management planner, project designer, air sampler, consultant, supervisor, or worker, non-industrial facility owner/operator, or demolition contractor of any asbestos project involving the disturbance of regulated asbestos containing RACM or asbestos contaminated materials ACM.

2. If projects occur at different buildings (different schools, for example) then each building shall be considered a separate project.

SECTION V.B., formerly known as SECTION IV.B., has been moved and revised as follows:

#### **B.** General Requirements.

1. Prior to beginning a renovation or demolition operation at a regulated facility, the owner/operator shall ensure that a building inspection is performed to identify the presence, location and estimated

<del>quantity of ACM which may be disturbed by the work activity. The owner/operator shall ensure that the</del>
building inspection is performed by a person licensed as a building inspector or management planner.
2. To be acceptable a building inspection shall have been performed no greater than three years prior
to the renovation or demolition, or if more than three years the previous inspection shall be confirmed and
verified by a person licensed as a building inspector.
3. The building inspector or management planner shall:
a. Comply with procedures specified in 40 CFR 763.86 as amended, and any subsequent
amendments and editions, in determining sampling locations and the number of representative samples to
be collected. Samples shall be collected from friable and non friable suspect ACM on affected interior
and/or exterior facility components.
<ul> <li>b. Prepare a detailed report based on findings of the inspection to include the information required</li> </ul>
in 40 CFR 763.85 (a)(4)(vi)(A) (E) as amended, and any subsequent amendments and editions. Also
include a description of non-suspect materials excluding: glass, metals, kiln-brick, cement, fiberglass,
concrete, pressed wood, cinder block, and rubber.
Provide an account of all materials are said to contain advance in the line on analysis of
c. Provide an assessment of all materials suspected to contain asbestos, including an evaluation of
the materials' current condition, estimated quantities, and potential for disturbance.
d. Include the name, license number, date of inspection, and signature of the licensed building
inspector or management planner who performed the inspection and completed the report.
<del></del>
e. Ensure that bulk samples are analyzed in accordance with requirements specified in 40 CFR
763.87 as amended and any subsequent amendments and editions, and this regulation. Any laboratory that
retains proficiency as demonstrated by successful participation in a nationally recognized testing program
may be acceptable.
41. A person licensed as an asbestos project designer shall prepare and implement the written design
for each abatement renovation project involving the removal of greater than 3,000 square, 1,500 linear or
656 cubic feet of RACM in a facility to be reoccupied. However, all projects must be designed in
accordance with 40 CFR 763.90(g) (Federal Register, Volume 5952, Number 23210, ThursdayFriday,
February 3 October 30, 1994 1987), as amended, and any subsequent amendments and editions, and this
regulation.
2. The asbestos project design must address:
2. The aspestos project design must address.
a. Preparation of each asbestos-related work area;
<b>1</b>
b. Establishment of each containment;
c. Establishment of each decontamination unit and procedures for use;
d. Evaluation and selection of various fiber release control options;
u. Evaluation and selection of various floci release control options,
e. Establishment, maintenance, and monitoring of negative air pressure within each containment;
, and an analysis of the product of
f. RACM enclosure, removal, encapsulation, or repair work practices;

- g. Visual inspection procedures for each asbestos abatement containment area;
- h. Clean-up and final clearance procedures;
- i. Air monitoring, including analysis, documentation, and any other required record keeping;
- j. Respiratory protection and personal protective equipment requirements;
- k. Procedures for on-site storage, handling, and disposal of ACM and project waste; and
- 1. Procedures for maintaining personnel licenses and training certificates on-site.
- 53. An owner/operator shall obtain an asbestos project license from the Department prior to beginning any NESHAP, small, minor, or demolition asbestos project subject to this regulation unless reporting quarterly as specified herein or in the case of an emergency removal.
- 64. When air monitoring is required by this regulation, the facility owner shall utilize a person licensed as an air sampler and ensure that all air monitoring is performed by a person licensed as an air sampler.
- 5. When any negative pressure enclosure or contained work area is required for any sized asbestos abatement project or demolition project, the following requirements shall apply:
- a. There shall be sufficient negative pressure differential equipment to ensure at least four air changes per hour;
- b. A minimum of -0.02 column inches of water pressure differential, relative to outside pressure, shall be maintained as verified and recorded by a manometer;
- c. The manometer record of daily readings (to be taken four times during every eight-hour work shift by a licensed air sampler independent from the contractor) verifying the negative pressure shall be maintained at the job site for Department review for the duration of the project;
- d. The inlet sensor of the manometer shall be located at the farthest point from any source of make-up air;
  - e. The manometer must be calibrated by the air sampler prior to the start of each work shift;
  - ef. Negative pressure shall be maintained until final clearance has been achieved; and
- fg. Air movement shall be directed away from employees performing asbestos work within the enclosure/containment and toward a HEPA filtration or other collection device.
- 76. The owner/operator shall notify the Department by telephone and follow up in writing as soon as possible before, but not later than, the notified start date following working day when a project has been canceled.
- <u>87</u>. The disposal requirements of this regulation shall be applicable to all asbestos-containing and asbestos-contaminated materials for any abatement activity.
- 98. The owner/operator shall ensure that contaminated water is filtered through a five-micron or

smaller filter, and discharged to a sanitary sewer system. No contaminated or filtered water shall be allowed to leak or drain outside of the work area.

SECTION V.C., formerly known as SECTION IV.C., has been moved and revised as follows:

#### C. Other Requirements at the Project Sites.

- 1. Every asbestos abatement entity performing abatement work shall have at the abatement project site a legible, clear copy of a valid current initial or refresher training certificate issued by an approved training provider.
- 2. Every asbestos abatement entity performing abatement work shall have a clear, legible copy of a valid Department-issued personnel license at the project site.
- 3. For the duration of an abatement project, the asbestos owner/operator shall ensure that:
- a. Each worker and supervisor employed at the abatement project site meets the applicable training and licensing requirements of Section XV. and Section III., and for roofing Section XI of this regulation.
- b. At all times while abatement (including preparation, removal, and cleanup) of regulated asbestos-containing material (RACM) is being performed at NESHAP and Ssmall projects, at least one licensed supervisor remains inside of each contained work area supervising the work. During abatement at regulated roofing projects, referenced in Section XI.C.1.a. & b., the supervisor shall be in the immediate work area supervising the work.
- c. A means is available at all times during abatement at NESHAP and Ssmall abatement projects so that for Department inspectors or other authorized visitors ean to communicate with persons within the immediate contained work area in order to gain access.
- d. For the duration of the asbestos project, a daily log containing the name and signature of every individual entering the negative pressure enclosure/regulated area shall be maintained on site.
- <u>d</u> e. The contained work area is secured at all times to prevent access of unauthorized visitors or unprotected persons.
- e f. Legible copies of Departmental letters of approval for alternative work practices are at the project site and available for inspection for the duration of abatement.
- 4. The contractor shall not proceed with abatement unless the air sampler fulfills all specified air monitoring requirements.
- 5. Commercial labor providers shall ensure that each worker or supervisor has completed appropriate training as specified in Section XV, or for roofers Section XI, and is licensed in accordance with Section III of this regulation.

SECTION V.D., formerly known as SECTION IV.D., has been moved and revised as follows:

#### D. Alternative Work Practices for Any Sized Asbestos Project.

1. The Department may, on a case-by-case basis, approve and issue a variance for an alternative

procedure for control of emissions from an asbestos abatement project, provided the owner/operator submits a written description of the alternative procedure to the Department prior to beginning work and demonstrates to the satisfaction of the Department that compliance with the prescribed procedures will not be practical or feasible, and that the proposed alternative procedures provide equivalent protection from asbestos exposure.

2. The owner/operator shall keep a copy of the Department's written approval at the work site and make it available for review by Department personnel upon request.

SECTION V.E., formerly known as SECTION IV.E., has been moved and revised as follows:

#### **E.** Emergency Operation.

- 1. For an emergency operation, the owner/operator shall must notify the Department by telephone immediately and must submit a project notification/application as early as possible before, but not later than, the working day following the emergency operation. The notification/application may be transmitted via a facsimile.
- 2. The facility owner shall notify the Department in writing of the date and hour that the emergency occurred; a description of the sudden, unexpected event; and an explanation of how the event caused an unsafe condition, public safety or health threat, equipment damage; or would impose an unreasonable financial burden. The owner shall submit this information with the project notification/application—as required in Section E.1. above.

SECTION VI. shall be renamed ASBESTOS BUILDING INSPECTION REQUIREMENTS and revised as follows:

#### SECTION VI. SMALL PROJECT ASBESTOS BUILDING INSPECTION REQUIREMENTS.

SECTION VI.A., formerly known as SECTION IV.B.1 and IV.B.2, has been moved and revised as follows:

#### B. General Requirements A. Applicability.

- 1. Prior to beginning a renovation or demolition operation at a regulated any facility, the facility owner and/or owner's representative shall ensure that an asbestos building inspection is completed performed by a person licensed as an asbestos building inspector or management planner to identify the presence of ACM.
- 2. In a multi-unit building, each separate room in each unit shall be inspected to confirm and quantify ACM homogeneous areas for sampling purposes. The asbestos building inspection shall include the facility or part of the facility affected by the renovation or demolition operation.
- 23. To be acceptable, a building inspection shall have been performed no greater earlier than three years prior to the renovation or demolition, or, if more than three years have elapsed since the most recent inspection, the previous inspection shall be confirmed and verified by a person licensed as a building inspector. The facility owner and/or owner's representative shall ensure the asbestos building inspection is completed by a person licensed as an asbestos building inspector or management planner.
- 34. The Department will not accept an asbestos building inspection or written report for any structure from an employee of an abatement company also involved in the removal of asbestos containing materials from that structure. When materials that will be disturbed by the renovation or demolition

operation are assumed to be asbestos without the use of laboratory bulk sample results, the provisions of Section VI.A.3 of this regulation does not apply.

- 5. An asbestos building inspector shall not participate in the analysis of the bulk samples he or she has collected. In a multi-unit building, each separate room in each part of the building or areas affected by the renovation or demolition operation shall be inspected to confirm and quantify ACM homogeneous areas for sampling purposes.
- 6. To be acceptable, a building inspection shall have been performed no earlier than three years prior to the renovation or demolition, or, if more than three years have elapsed since the most recent inspection, the previous inspection shall be confirmed and verified by a person licensed as a building inspector.
- 7. The Department will not accept an asbestos building inspection or written report for any structure from an employee of an abatement company also involved in the removal of asbestos-containing materials from that structure.
- 8. An asbestos building inspector shall not participate in the analysis of the bulk samples he or she has collected.

SECTION VI.B., formerly known as SECTION IV.B.3., has been moved and revised as follows:

#### B. Asbestos Inspection.

- <u>3. The building inspector or management planner shall:</u>
- —a1. Comply with procedures specified in 40 CFR 763.86 as amended, and any subsequent amendments and editions, in determining sampling locations and the number of representative samples to be collected. Samples shall be collected from friable and non-friable suspect ACM on affected interior and/or exterior facility components. Visually inspect the areas that may be affected by the renovation or demolition operation to identify the locations of all suspected ACM. For a pre-demolition inspection, destructive sampling techniques shall be utilized.
- B2. Prepare a detailed report based on findings of the inspection to include the information required in 40 CFR 763.85 (a)(4)(vi)(A) (E) as amended, and any subsequent amendments and editions. Also include a description of non-suspect materials excluding: glass, metals, kiln brick, cement, fiberglass, concrete, pressed wood, cinder block, and rubber. Touch all suspected ACM to determine condition, friability, and whether ACM is a regulated material in areas that may be affected by the renovation or demolition operation.
- c3. Provide an assessment of all materials suspected to contain asbestos, including an evaluation of the materials' current condition, estimated quantities, and potential for disturbance. Identify all homogeneous areas of suspected ACM in areas that may be affected by the renovation or demolition operation.
- d4. Include the name, license number, date of inspection, and signature of the licensed building inspector or management planner who performed the inspection and completed the report. In areas that may be affected by the renovation or demolition operation, Aassume that some or all of the homogeneous areas are ACM, and/or for each homogeneous area that is not assumed to be ACM, collect and submit bulk samples for analysis in compliance with this Section.

- e5. Ensure that bulk samples are analyzed in accordance with requirements specified in 40 CFR 763.87 as amended and any subsequent amendments and editions, and this regulation. Any laboratory that retains proficiency as demonstrated by successful participation in a nationally recognized testing program may be acceptable. Assess suspect ACM in areas where samples were collected, in areas assumed to be ACM, and in areas identified as asbestos during previous inspections.
- 65. Material Safety Data Sheets (MSDS), statements from the manufacturer, and architecture signoff will not be accepted as proof that a building product contains no asbestos, except in cases where the owner can verify the direct correlation of the building product to the MSDS, statements from the manufacturer and/or architecture signoff documents. The Department reserves the right to reject documentation that it deems unacceptable.

#### C. Asbestos Inspection Report Contents.

Record the following and submit a written asbestos building inspection report to the building owner/owner's representative.

Prior to each demolition operation and upon request for renovations, the Department shall be provided with a complete legible copy of the asbestos building inspection report.

- 1. The inspection report shall include:
  - a. A title page denoting:
- (1) The client's name, company, address, and telephone number, and the name and exact location of the facility inspected;
  - (2) The date the inspection was performed;
  - (3) The date the inspection report was written; and
- (4) The printed name and telephone number of the inspector(s), and his or her affiliated company name, address, and telephone number.
- b. A cover letter to the building owner or owner's representative that describes the purpose of the inspection; a general synopsis of the inspection and results; and the name, title, and signature of the inspector(s) and report writer, if different.
- c. A detailed narrative of the physical description of the building that includes or part of the building affected by the renovation or demolition operation that includes:
- (1) The square footage of the building or part of the building affected by the renovation or demolition operation;
- (2) The building materials used in the construction of the exterior, roof, interior, and basement or crawlspace of the building or part of the building affected by the renovation or demolition operation; and
- (3) An estimated or exact quantity (square or linear feet) for all suspect materials whether sampled for or assumed to be asbestos that may be affected by the renovation or demolition operation.

(4) Also include a description of non-suspect materials excluding: glass, metals, kiln brick, cement, fiberglass, concrete, pressed wood, cinder block, and rubber. d. An executive summary that details: (1) The type of suspect ACM (e.g., TSI, floor tile, mastic), total square or linear footage, and the total number of samples collected for each separate homogenous area affected by the renovation or demolition operation; (2) The date of the inspection, type, condition, quantity, sample results, and exact location of ACM positively identified in the building or assumed to be ACM in the part of the building affected by the renovation or demolition operation; and (3) A list of the homogeneous areas identified are: (a) Surfacing material that includes, but is not limited to, joint compound; plaster; and painted, troweled on, or spray-applied textured material; (b) Thermal system insulation (TSI) that includes, but is not limited to, pipe and boiler insulation; or (c) Miscellaneous material that includes, but is not limited to, flooring, roofing, mastics, gaskets, cementitious materials, caulkings, ceiling tiles, fire doors, wall boards, and flexible duct connections. (4) Type of damage or significant damage (e.g., flaking, blistering, water damage, or other signs of physical damage). (5) Severity of damage [e.g. major flaking or severely torn jackets (as opposed to occasional flaking or minor tears to jackets)]. (6) Extent or spread of damage over large areas or large percentages of the homogeneous <del>area.</del> (74) Whether the material is accessible for the building or part of the building affected by the renovation or demolition operation. (8 5) The material's potential for disturbance for the building or part of the building affected by the renovation or demolition operation. (9) Known or suspected causes of damage or significant damage (e.g., air erosion, vandalism, vibration, water). (10) Preventive measures that may be used to eliminate the reasonable likelihood of significantly damaging previously undamaged ACM. (11) An indication of the classification of each suspect RACM as one of the following: (a) Damaged or significantly damaged thermal system insulation ACM; (b) Damaged friable surfacing ACM:

- (c) Significantly damaged friable surfacing ACM;
  - (d) Damaged or significantly damaged friable miscellaneous ACM;
  - (e) ACM with the potential for damage; or
  - (f) ACM with the potential for significant damage.
- e. For renovation and demolition operations, T the inspector's recommendation for the disposition of the ACM determination if ACM is friable or non-friable.
- f. Except when suspect ACM materials are assumed to be asbestos, include a A complete, clear, legible copy of all laboratory bulk sample results.
- g. Clear, legible drawings and/or photographs to clarify the scope of the renovation or demolition operation effectively communicate site conditions. Include a photograph of the exterior of each building inspected and of each homogeneous area. Illustrate the exact location of each sample collected. For facilities that involve a trade secret or confidential component or an affected area process, a request for a variance may be submitted.
- h. The printed name and signature of each accredited inspector who collected the samples, and a clear legible copy of his or her Department issued asbestos building inspector or management planner license.

#### D. Sampling.

- 1. A licensed asbestos inspector shall collect, in a statistically random manner, a minimum of three bulk samples from each homogeneous area of any surfacing TSI, and floor tile that is not assumed to be ACM, and shall collect the samples as follows:
- a. At least three bulk samples shall be collected from each homogeneous area that is 1,000 or fewer square feet (sf) or linear feet (Lf) in size.
- b. At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 but fewer than or equal to 5,000 sf or Lf .
- c. At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 sf or Lf.
- 2. A licensed asbestos inspector shall collect, in a statistically random manner, at least three bulk samples from each homogeneous area of TSI and any miscellaneous material that is not assumed to be ACMs, excluding floor tile. In accordance with ASTM E2356, and any subsequent amendments and editions, negative results for non-friable organically bound materials such as flooring and roofing shall be verified with at least one TEM analysis.
- 3. Each owner/operator shall have all bulk samples collected per this regulation analyzed for asbestos using laboratories accredited by the National Institute of Standards and Technology (NIST), National Voluntary Laboratory Accreditation Program (NVLAP), or an equivalent standard as approved by the Department.

- 4. Bulk samples shall be analyzed for asbestos content by polarized light microscopy (PLM) using the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" found in Appendix E to subpart E of 40 CFR 763, the "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116), ASTM E2356, or other method(s) deemed acceptable by the Department on a case-by-case basis.
- 5. A homogeneous area is not considered to contain ACM only if the results of all samples required to be collected from the area show asbestos in amounts of one percent (1%) or less.
- 6. A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than one percent (1%).

SECTION VII. shall be renamed STANDARDS FOR AIR SAMPLERS and revised as follows:

#### SECTION VII. MINOR PROJECT STANDARDS FOR AIR SAMPLERS.

#### A. Applicability.

This Section shall apply to each owner, owner's representative and/or air sampler engaged in an asbestos project where air sampling is required.

SECTION VII.B., formerly known as SECTION IV.F., has been moved and revised as follows:

#### **FB.** General Requirements.

- 1. Area air sampling shall be performed by a licensed air sampler.
- 2. Area Abatement air sampling data collected by a licensed air sampler under contract with or employed by the asbestos contractor performing the abatement shall will not be acceptable to the Department.
- 3. Air sampling shall be conducted using collection media, procedures, and analytical methods in accordance with NIOSH Method 7400 if when Phase Contrast Microscopy (PCM) is used, or and with Electron Microscope Measurement of Airborne Asbestos Concentrations. [EPA Report 600/2-77-178 (1978) and EPA Contract No. 68-02-3266 (1984)], if when Transmission Electron Microscopy (TEM) is used.
- 4. Where clearance air monitoring is required by this regulation, the clearance standard for any abatement project shall be: by Phase Contrast Microscopy less than or equal to 0.01 f/cc; by Transmission Electron Microscopy less than or equal to 70 s/mm², or a value of Z less than or equal to 1.65 for a Z test carried out as described in 40 CFR. 763 Subpart E Appendix A Section IV.C. as amended, and any subsequent amendments and editions.
- 54. Any alternative procedure for clearance sampling shall require prior written approval from the Department. The written request must provide a detailed description of the alternative procedure and an explanation of how it will provide an equivalent level of protection to facility occupants.
- 6. Alternative sampling schemes for background or daily area air sampling are allowed without prior Departmental approval. However, the air sampler shall submit the alternative scheme in writing to the Department upon request.

- 75. The air sampler shall:
- a. Ensure that all air sampling pumps in use are accurately calibrated and operating properly, and that the filtered sampling cassettes are securely attached to the pumps for the duration of sampling prior to operation by utilizing a rotometer that has been calibrated within the past six months using a primary standard, such as a bubble burette or a dry calibrator. Calibration data shall be maintained at the project site for the duration of abatement.
- b. Maintain current background, daily, and clearance air monitoring data at the project site, and make the data available for review by Department personnel and other authorized visitors upon request. Ensure that all air sampling pumps are operating properly and that the filtered sampling cassettes are securely attached to the pumps for the duration of sampling.
- c. Ensure that adequate sampling equipment and devices are available for use at the project site. b. Maintain current background, daily, and clearance air monitoring data at the project site, and make the data available for review by Department personnel and other authorized visitors upon request.
- d. Ensure that there are always at least four sampling pumps operating properly for the duration of any asbestos project requiring daily area air monitoring.
- de. Collect area air samples for a minimum of two and one half hours with a minimum flow rate of three liters per minute for each four-hour work period during preparation, removal, and clean-up activities at NESHAP projects.
  - f. Maintain a log for the duration of an asbestos project describing daily activities.
- NOTE Subparagraphs g and h below were formerly known as SECTION VI.C.2.b. and VI.C.2.c., respectively.
- bg. Follow the procedures specified in *Measuring Airborne Asbestos Following an Abatement*Action, EPA Report 600/4 85 049 (1985), NIOSH 7400 or an equivalent method acceptable to the Department, when conducting clearance air monitoring.
- eh. Submit a written copy of the sampling procedures and clearance air monitoring results to the facility owner within five working days following the completion of the project and to the Department upon request.

SECTION VII.C., formerly known as SECTION V.C.1, has been moved and revised as follows:

#### 1C. Background Monitoring.

- 1a. The air sampler shall collect a sufficient number minimum of five air samples as determined by the air sampler, building owner, or his representative at a NESHAP abatement project prior to the start of abatement activities in order to obtain an index of background airborne fiber concentrations.
- 2b. Samples shall be taken both inside and outside the work area—within the building to establish existing ambient air levels under normal activity conditions.
- 3e. The air sampler shall document any variations and indicate the reasons for doing so justifications for the variations, and shall maintain a written copy of the sampling variation(s) at the project site for the duration of the abatement, and shall provide the information to the Department upon request.

- 4. No background air sampling is required at small, minor, and O&M abatement projects.
- 5. Background sampling, when required, may be analyzed using PCM methods.

SECTION VII.D., formerly known as SECTION V.C.2., has been moved and revised as follows:

### 2D. Daily Monitoring.

1a. Once abatement activities begin at a NESHAP abatement project, the air sampler shall conduct
representative daily area sampling in the following areas:
a.(1) In the equipment room of the decontamination enclosure systems:
b.(2) At the entrance to the clean room of each decontamination enclosure system;
<del>-</del>
c.(3) Outside the work area in uncontaminated areas of the facility;
d.(4) Where the negative pressure differential equipment exhausts, at a distance no greater than
five to eight feet from the air flow when feasible. When multiple machines are in operation, the air
sampler may rotate the sampling; however, all exhausts must be monitored daily; and

- e. The total volume of air collected for daily area air sampling shall be between 1,200 liters and 1,800 liters in accordance with 40 CFR Part 763 and/or NIOSH 7400 and any subsequent revisions for analytical methodology.
- 2. Once abatement activities begin at a small, minor, or O&M abatement project, daily area sampling shall be performed.
- 3.b. The air sampler shall document any variations and indicate the reasons for doing so justifications for the variations, and shall maintain a written copy of the sampling variation at the project site for the duration of the abatement and provide the information to the Department upon request.
  - 4. Daily air sampling, when required, may be analyzed using PCM methods.

SECTION VII.E., formerly known as SECTION IV.F.4., has been moved and revised as follows:

#### E. Clearance Monitoring.

- 14. Where clearance air monitoring is required by this regulation, the clearance standard for any NESHAP abatement project shall be: by Phase Contrast Microscopy less than or equal to 0.01 f/cc; or by Transmission Electron Microscopy (TEM). The clearance standard is less than or equal to 70 s/mm<sup>2</sup>, or a value of Z less than or equal to 1.65 for a Z test carried out as using the Mandatory TEM Method described in 40 CFR 763, Subpart E Appendix A of Subpart E, Section IV.C. as amended, and any subsequent amendments and editions. The Z test with a value of Z less than or equal to 1.65 for a Z test carried out as described in 40 CFR 763, Appendix A of Subpart E, as amended, and any subsequent amendments and editions, shall be allowed for clearance purposes only with prior Department approval.
- 2. The total volume of air collected for clearance air sampling shall be between 1,500 liters and 2,000 liters in accordance with 40 CFR Part 763 and/or NIOSH 7400 and any subsequent revisions for analytical methodology.

- NOTE Subparagraphs 3 through 7 below were formerly found in SECTION V.C.3.
- <u>3a.</u> A licensed air sampler shall conduct, at a minimum, PCM clearance air monitoring at the completion of each NESHAP project. Projects exceeding the project design threshold (3,000 sf, 1,500 Lf, and 656 cubic feet of RACM) will require TEM clearance air monitoring.
- 4b. When conducting clearance air monitoring, the air sampler shall follow the procedures specified in *Measuring Airborne Asbestos Following An Abatement Action*, EPA Report 600/4-85-049 (1985), which is hereby incorporated by reference, or an equivalent method acceptable to the Department. Procedures shall be summarized and submitted to the facility owner. The air sampler shall report the clearance air monitoring results in writing to the facility owner within five working days following completion of the project and to the Department upon request.
- 5e. Sampling shall not begin until wet cleaning has been completed and no visible pools of water or condensation remain. Sufficient time shall be allowed for all surfaces to dry. The sampling zone shall be representative of the building occupants' breathing zone.
- 6d. Sampling shall not begin until the air sampler has performed a visual inspection and authorizes final clearance air monitoring.
- 7e. Sampling shall be conducted only after all interior wall, ceiling, and floor polyethylene sheeting has been removed. Critical barriers and the five-stage decontamination enclosure system shall remain in place until the abated area has passed final clearance.
- NOTE: Subparagraph 8 below was formerly located in SECTION VI.C.2.a.
- 8a. For projects subject to 40 CFR Part 763, AHERA, as amended, and any subsequent amendments or editions, conduct clearance air monitoring after abatement in areas to be reoccupied, (including interior spaces, porticos, and covered exterior walkways), and abatement on exterior portions of mechanical systems used to condition interior spaces. For projects equal to or greater than 160 sf, 260 Lf or 35 cubic feet, TEM clearance air monitoring is required.
- 9. At least one licensed asbestos project supervisor shall remain at an asbestos project site for the duration of the final clearance visual inspection and clearance air sample collection process.

SECTION VIII. shall be renamed DISPOSAL REQUIREMENTS and revised as follows:

# SECTION VIII. OPERATION AND MAINTENANCE ACTIVITIES DISPOSAL REQUIREMENTS.

#### A. Applicability.

This Section shall apply to each owner/operator engaged in a renovation abatement project.

SECTION VIII.B., formerly known as SECTION IV.H., has been moved and revised as follows:

#### H. DisposalB. General Requirements.

1. Each owner/operator engaged in a renovation abatement project subject to this Section shall ensure that:

a. AllEach containers (bags, drums, wrapped components, etc.) are is labeled so that labels have
the appearance of or are designed in accordance with OSHA 29 CFR 1926.1101, (August 10, 1994), as amended, and any subsequent amendments and editions, and EPA 40 CFR 61.150, (November 20, 1990)
as amended, and any subsequent amendments and editions.
b. All asbestos waste bags and/or containers shall be properly labeled prior to being placed into the waste transport vehicle.
bc. Waste generator labels are:
(1) Written legibly and in indelible ink; and
(2) Displayed in a prominent location on the outer most bag or container:
ed. Asbestos waste is disposed of at a landfill approved or permitted to accept asbestos waste.
de. Asbestos waste is not stored at a location other than the facility site without prior writter approval from the Department.
ef. Stored asbestos waste is maintained in a secured, locked location where access is controlled.
fg. Asbestos waste is transported and disposed of in a manner that will not permit the release of asbestos fibers into the air (e.g., enclosed or retrofitted covered vehicle).
gh. Asbestos waste is transported in accordance with the following procedures:
(1) The cargo area of the transport vehicle shall be free of debris and be lined with at least one layer of 6-mil polyethylene sheeting.
(a) Floor sheeting shall be installed first and shall extend up the side walls at least
12 inches and shall be taped securely into place.
(b) Wall sheeting shall overlap by at least six inches and be taped into place.
(c) Ceiling sheeting shall extend down the sides of the walls at least six inches and be taped into place.
(2) If asbestos waste is transported exclusively in leak-tight clean drums, or other leak-tight, rigid containers approved by the US Department of Transportation as appropriate shipping containers for asbestos waste, then polyethylene sheeting is not required.
(3) Drums, bags, wrapped components, and other leak-tight containers that have been removed from the work area shall be labeled in accordance with H.1.a. of this sSection prior to being loaded into an appropriate vehicle for transportation.
(4) Any debris or residue observed on containers or surfaces outside of the work area resulting from abatement activities shall immediately be cleaned using wet methods and a vacuum equipped with a HEPA filter.
(5) Containers shall be carefully placed-and, not thrown, into the truck cargo area. Drums shall be placed on a level surface in the cargo area and packed tightly or blocked and braced to prevent

shifting and tipping. Large structural components shall be secured to prevent shifting.
(6) Asbestos waste which that is removed from a facility site shall be transported directly to an approved landfill unless it is stored in the location designated in a temporary storage license issued
to the owner/operator by the Department.
(7) Metal dumpsters or containers in which asbestos waste is temporarily stored at the abatement site shall be lined with 6-mil polyethylene sheeting to prevent contamination, and shall have doors and tops. The doors and tops shall be closed and locked except during loading or unloading of asbestos waste.
(8) Metal dumpsters or containers used for waste storage shall be labeled in accordance with OSHA 29 CFR 1926.1101, August 10, 1994, as amended, and any subsequent amendments and editions.
(9) Bags shall be free of splits, rips, and tears, and shall be carefully placed, not thrown,
into the transport vehicle.
(10) Any equipment, materials, or supplies stored in the waste transport vehicle shall be isolated from the asbestos waste by a leak-tight barrier. All containers and wrappings shall be free of asbestos contamination.
(11) Non-asbestos waste shall not be placed in waste containers or bags labeled as
asbestos waste.
(12) The vehicle used to transport asbestos wastes shall be labeled in accordance with 40 CFR 61.149(d)(1)(i), (ii), and (iii), as amended, and any subsequent amendments and editions.
2. The owner/operator shall dispose of asbestos waste in accordance with the following procedures:
a. Upon reaching the landfill, vehicles shall approach the dump location as closely as possible to unload asbestos waste.
b. Bags, drums, and wrapped components shall be inspected when unloaded at the disposal site. Material in damaged containers shall be rewrapped, or shall be repacked in empty drums or bags.
c. Waste containers shall be placed on the ground at the disposal site, not dropped or thrown out.
d. Unloading of metal dumpsters or containers by tipping or tilting is permitted without reinspecting individual bags or drums, provided there are no visible emissions.
e. Following the removal of all containerized waste, polyethylene sheeting shall be removed and discarded in bags or drums along with contaminated cleaning materials and protective clothing.
f. After asbestos waste has been unloaded, the truck cargo area, including the floor, walls, and ceiling, shall be decontaminated using wet methods or a vacuum equipped with a HEPA filter until no visible residues remain.
g. A copy of a completed waste shipment record with signature of the landfill operator shall be submitted to the Department by the asbestos contractor within 45 working days of completion of removal

abatement.

- h. A waste shipment record shall be used and shall include the asbestos project license number; names of the facility owner, contractor and disposal site; the estimated quantity of asbestos waste; and the type and number of containers used. Each time the material changes custody, the record shall be signed by the person(s) receiving the waste. If a separate hauler is used, the hauler's name, address, telephone number, and the driver's signature shall also appear on the record.
- i. The owner/operator shall ensure that asbestos-containing or asbestos-contaminated waste materials are not burned or recycled.
- j. Commercial rental vehicles shall not be used to transport any asbestos, asbestos-containing, or asbestos-contaminated waste. This prohibition does not apply to tractors, but does apply to cargo compartment areas which are used to store and/or transport asbestos waste. Rental vehicles do not include leased vehicles.

#### C. Temporary Asbestos Storage Containment Area Site.

- 1. Prior written approval must be obtained from the Department before a site other than an asbestos abatement project site can be used for the storage of regulated asbestos-containing waste from small, minor, or O&M asbestos Projects. NESHAP asbestos project waste must be deposited into an approved landfill and may not be stored.
- 2. Written authorization shall also be obtained from the facility owner or his representative prior to transporting regulated asbestos-containing waste from the facility site of generation (verification of the property owner's authorization must be sent directly to the Department by the facility owner).
- 3. In order to have a site permitted as a Temporary Asbestos Storage Containment Area, the operator must demonstrate that adequate precautions have been and will continue to be taken to ensure that the waste is properly maintained for the duration of its storage.
- 4. An operator must submit an application requesting a license for a Temporary Asbestos Storage Containment Area to the Department for review at least 45 working days in advance. The Department will acknowledge receipt of the application and notify the applicant of any deficiency in the application.
- 5. Within 45 working days after receiving a completed application, including additional information requested, the Department will issue a license or deny issuance of the license.
- 6. The Department reserves the right to inspect the proposed Temporary Asbestos Storage Containment Area prior to granting final approval.
- 7. Approval of the Temporary Asbestos Storage Containment Area will be valid for one year from the date of issuance unless the authorization is revoked or suspended by the Department at an earlier date.
- 8. The Department may revoke or suspend a license based on falsification of or known omission of information from an application for this license, omission or improper use of work practices, improper disposal of ACM, and/or spread of asbestos waste beyond the containment area.
- 9. In order to renew a storage license, the operator of a Temporary Asbestos Storage Containment Area must resubmit an application for off-site storage of regulated asbestos-containing waste to the Department at least 45 working days prior to the expiration of the existing permit. Previous approval of a site as a Temporary Asbestos Storage Containment Area does not guarantee re-issuance or continuance of a storage license.

SECTION IX. EXEMPTION FROM WETTING FOR ANY SIZED PROJECT, formerly known as SECTION IV.G., has been moved and revised as follows:

## SECTION IX. GLOVEBAG TECHNIQUES EXEMPTION FROM WETTING FOR ANY SIZED PROJECT.

## A. General Provisions. —al. The owner/operator has obtained prior written approval from the Department based on a written application that wetting to comply with this Section would unavoidably damage equipment or present a safety hazard; and — b2. The owner/operator uses all of the following emission control methods: —(1)a. A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of asbestos materials. The system must exhibit no visible emissions to the outside air or must be designed and operated in accordance with the requirements in EPA Regulation 40 CFR 61.152, as amended, and any subsequent amendments and editions. (2)b. A glovebag system designed and operated in accordance with the requirements of OSHA regulation 29 CFR 1926.1101, as amended, and any subsequent amendments and editions. — (3)c. Leak-tight wrapping to contain all RACM prior to dismantlement. -e3. In renovation operations where wetting would result in equipment damage or a safety hazard and the methods allowed in this Section cannot be used, an owner or operator may use another method after obtaining written approval from the Department based on its determination that it-the alternative method is equivalent to wetting in controlling emissions. The owner/operator shall keep a copy of the Department's written approval at the work site and make it available for review by Department personnel upon request. SECTION IX.B., formerly known as SECTION IV.G.2, has been moved and revised as follows: **B.** Temperature Constraints. $\frac{2}{1}$ . When the temperature at the point of wetting is below $0^{\circ}$ C (32° F): —al. During periods when wetting operations are suspended due to freezing temperatures, the owner/operator must record the temperature in the area containing the asbestos-coated or covered facility components at the beginning, middle, and end of each workday and keep daily temperature records. A copy of these records must be maintained at the project site and made available for inspection by Department personnel upon request. The facility owner must maintain these temperature records for two years from the date the project is completed, and shall provide a legible copy of the data to the Department upon request.

— b2. The owner/operator may request to use an alternative work practice by submitting to the Department a written description of control measures to be used that will afford the same level of

protection as wetting. A legible copy of the Department's approval letter must be available at the project site for the duration of the asbestos project and shall be made available for review by Department personnel upon request.

—e3. The owner/operator shall remove facility components containing, coated with, or covered with RACM as units or in sections; and shall secure the units or sections leak-tight in 6-mil or thicker polyethylene sheeting.

SECTION X. shall be renamed NESHAP PROJECTS and revised as follows:

#### SECTION X. OUTDOOR REMOVALS NESHAP PROJECTS.

SECTIONS X.A. and X.B. were formerly known as SECTIONS V.A. AND V.B., respectively, and have been moved and revised as follows:

#### A. Applicability.

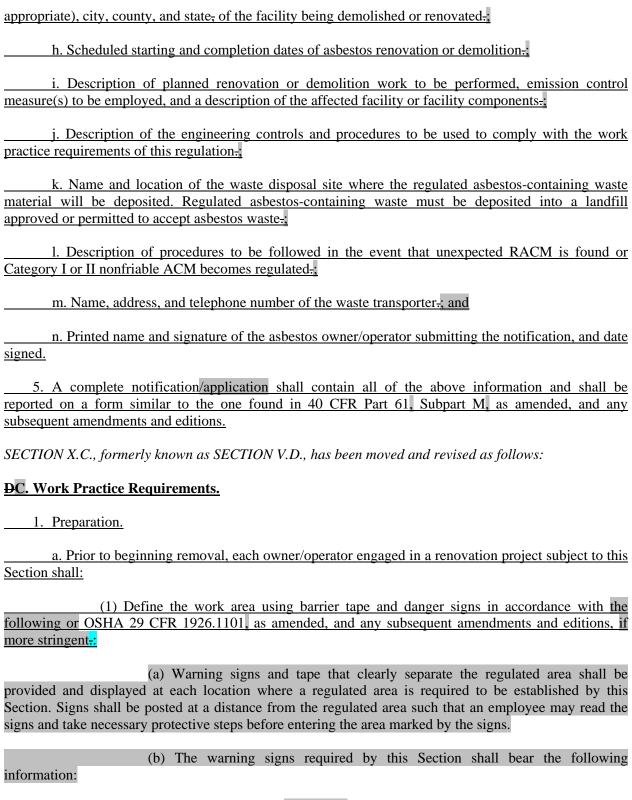
The notification/application, work practice, air sampling, clean-up and disposal requirements of this Section shall apply to each owner/operator of an indoor renovation abatement as bestos project, where the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed includes at least 260 linear feet on pipes, or 160 square feet on other facility components, or 35 cubic feet off of facility components where the area or length could not be measured prior to abatement.

#### B. Notification/Application.

- 1. Each owner/operator of a renovation or demolition operation to which this Section applies shall: a. Provide the Department with written notification/application at least 40ten complete working days prior to any renovation or demolition operation, and pay all applicable project fees. Acceptable delivery of the notification and fee payment is by U.S. Postal Service or commercial delivery service, by hand, or by other methods deemed acceptable to by the Department. b. Update/revise the notification/application and pay appropriate fees as required necessary, when any previously notified information changes, including but not limited to, when the amount of asbestos affected changes increases or decreases more than five percent (5%), or when the project start or completion date changes, or when the disposal site changes, and/or the project has been cancelled. The owner/operator shall notify the Department by telephone and follow up in writing as soon as possible before, but not later than, the following working day. c. Prior to each demolition operation, and upon request for renovations, Pprovide the Department with a complete legible copy of the asbestos building inspection report prior to each demolition operation, and upon request for renovations. d. Begin abatement on the start date contained in the Department-issued asbestos project license. e. Project designs shall be submitted at the Department's request.
- 2. When the asbestos stripping or removal operation or demolition operation covered by this Section will begin on a date earlier than the previously notified start date, the owner/operator shall provide the Department with written notification/application of the new start date at least 10ten working days before asbestos stripping or removal work will begin. The Department may waive this requirement on a case-by-

case basis, although the owner/operator shall provide all required information in writing prior to commencing any abatement activities.

3. The owner/operator of an asbestos stripping or removal operation covered by this Section shall:
a. Notify the Department of the new start date by telephone as soon as possible before, but no later than, the original start date, when the renovation will begin after the date contained in the initial notification/application and in the asbestos project license issued by the Department.
b. Provide the Department with an updated written notice of the new start date as soon as possible before, but not later than, the original start date. Acceptable delivery of the updated notice is by the U.S. Postal Service or commercial delivery service, by hand, or by other methods deemed acceptable to by the Department.
c. Provide the Department with an updated written notice of the new completion date as soon as possible before, but no later than, one working day following the completion of the project when the asbestos stripping or removal operation covered by this Section will end on a date earlier than contained in the initial notification and in the asbestos project license issued by the Department. Acceptable delivery of the updated notice is by the U.S. Postal Service or commercial delivery service, by hand, or by other methods deemed acceptable toby the Department.
d. Provide the Department with written notification/application of the new completion date as soon as possible before, but not later than, the original completion date when the asbestos stripping or removal operation covered by this Section will end on a date later than contained in the initial notification/application and in the asbestos project license issued by the Department. Acceptable delivery of the updated notice is by the U.S. Postal Service or commercial delivery service, by hand, or by other methods deemed acceptable toby the Department.
4. The written notification /application shall include:
a. Indication whether the notification/application is an original, revision, or cancellation-;
b. Name, address, and telephone number of the owner/operator-;
c. Type of operation: demolition or renovation-;
d. Description of the facility or affected part of the facility, including the square footage, number of floors, age, and prior, present, and intended use of the facility.
e. Description of the procedures and analytical methods used to detect the presence of asbestos-containing materials ACM (regulated and non-regulated), date of inspection, and name, address, telephone number, and building inspector's license number of the individual building inspector who performed the inspection.
f. An estimate of the approximate amount of RACM and Category II nonfriable ACM to be removed from the facility in terms of length of pipe in linear feet; surface area in square feet on other facility components, or volume in cubic feet, if already off facility components; also, an estimate of the approximate amount of Category I nonfriable ACM in the affected part of the facility that will not be removed prior to demolition.
g. Location and street address (including building number or name and floor or room number, if



#### **DANGER**

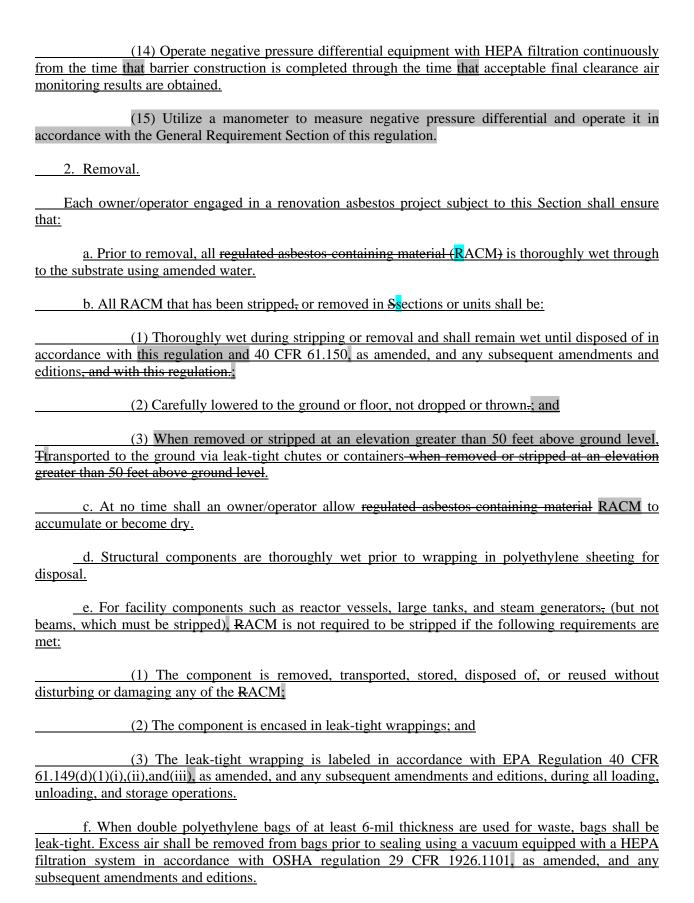
#### **ASBESTOS**

# CANCER AND LUNG DISEASE HAZARD

# AUTHORIZED PERSONNEL ONLY

(2) Shut down, lock, and tag out all HVAC equipment in or passing through the work
area. Seal alleach intake and exhaust openings and any seams in system components with two sheets of 6-
mil polyethylene sheeting and tape.
(2) Detach and met along generable electrical heating and contileting assignment and
(3) Detach and wet clean removable electrical, heating, and ventilating equipment and
other items which may be connected to asbestos surfaces.
(4) Remove existing filters from the HVAC system and dispose of as asbestos-
contaminated waste.
(5) Seal each opening between the work area and uncontaminated areas including
windows, doorways, elevator openings, corridor entrances, drains, ducts, electrical outlets, grills, grates,
diffusers, and skylights with a critical barrier consisting of at least one two independent sheets of 6-mil or
thicker polyethylene sheeting secured in place. These critical barriers must be maintained leak-tight for
the duration of asbestos abatement.
(6) Thoroughly clean and remove all movable objects from the work area.
(0) Thoroughly clean and remove an movable objects from the work area.
(7) Thoroughly clean, then cover and secure all each non-movable objects in the work
area with at least one sheet of 4-mil or thicker polyethylene sheeting.
(8) Use polyethylene sheeting to isolate contaminated from uncontaminated areas, and
ensure that it the sheeting is attached securely in place and properly maintained at all times.
(9) Prevent contamination of carpet with asbestos containing materials ACM, or dispose
of the carpet as asbestos-contaminated waste.
of the earper as assesses contaminated waster.
(10) Cover floors not being abated with at least two layers of 6-mil or thicker
polyethylene sheeting. Floor sheeting shall be installed first and shall extend at least 12 inches up the
walls at least 12 inches and be taped into place. No seams shall be located at wall/floor joints. Spray-
applied polyethylene coating shall not be used.
(11) Cover walls and ceilings not being abated with at least one sheet of 4-mil or thicker
polyethylene sheeting. Wall sheeting shall be installed to minimize joints and shall extend at least six
inches beyond wall/floor joint at least 6 inches and be taped into place. Ceiling sheeting shall extend at
least 12 inches down the wall at least 12 inches and be sized and taped into place. No seams shall be
located at wall/ceiling or wall/wall joints.
(12) Construct a decontamination enclosure system adjoining the contained work area.
The decontamination enclosure shall be built in a manner which that will prevent track-out of RACM, and
shall consist of: a clean room equipped with appropriate storage containers and adequate space for
changing clothing; an air lock; a shower room containing hot and cold or warm running water controllable
at the tap; an air lock; and an equipment room suitable for storage of tools and equipment.
- · · · · · · · · · · · · · · · · · · ·
(13) Construct a clear viewing port measuring at least 24 inches by 24 inches in an
external wall of the contained work area to allow unobstructed observation of abatement activities in the

work area.



g. Asbestos containing material ACM from within the work area is not permitted outside of the
work area except in sealed leak-tight containers.
h. Any person exiting or any equipment, or machinery being removed from the contaminated work area shall be thoroughly decontaminated. If equipment or machinery, is not or cannot be thoroughly decontaminated, it shall be sealed in leak-tight containers. No visible residue shall appear on the outside surface of the container.
3. Cleanup.
a. Each owner/operator engaged in a renovation abatement project subject to this Section shall ensure that:
(1) Following abatement, a visual inspection of the abated substrate is performed.
(2) A coating of a compatible encapsulating agent is applied to porous surfaces that have been stripped and cleaned of asbestos-containing materials ACM. The encapsulant must be allowed to thoroughly dry prior to additional cleaning or final air clearance.
(3) Prior to final clearance, tThe air sampler or the owner's representative shall-inspects the abated area prior to final clearance. If there is any evidence of contamination, the asbestos contractor shall perform additional wet cleaning and HEPA-vacuumingHEPA vacuuming.
(4) All polyethylene sheeting, except for critical barriers and the decontamination enclosure system, is removed and disposed of as asbestos-contaminated waste.
(5) With only the critical barriers and decontamination enclosure system left in place, the entire work area, including any duct work, shall be is wet-cleaned and HEPA-vacuumedHEPA vacuumed until no visible residue remains.
(6) Areas exceeding clearance standards are re-cleaned by the contractor using wet methods and HEPA vacuumingHEPA vacuuming. Re-cleaning, drying, and retesting shall be repeated until the satisfactory clearance standard is achieved.
(7) Following satisfactory clearance of the work area, remaining polyethylene critical barriers and decontamination enclosure systems are removed and disposed of as asbestos-contaminated waste.
(8) Portable decontamination trailers are cleaned and polyethylene sheeting disposed of as contaminated waste.
b. Re-establishment of the work area shall only occur following completion of clean-up procedures and after clearance air monitoring has been performed and documented to the satisfaction of the air sampler or of the facility owner or his representative.
c. Replacement materials shall only be installed following completion of abatement. This does not include outdoor projects subject to this regulation.
4. Disposal.
The disposal requirements of the Disposal Section of this regulation <del>IV.H.</del> shall apply.

SECTION X.D., formerly known as SECTION V.C., has been moved and revised as follows:

## **C** D. Air Sampling and Analysis Procedures.

The background, daily, and clearance air monitoring requirements of the Air Sampling Section of this regulation shall apply.

NOTE - SECTION XI. ROOFING PROJECTS shall be removed in its entirety and replaced and renamed as SECTION XI. SMALL PROJECTS.

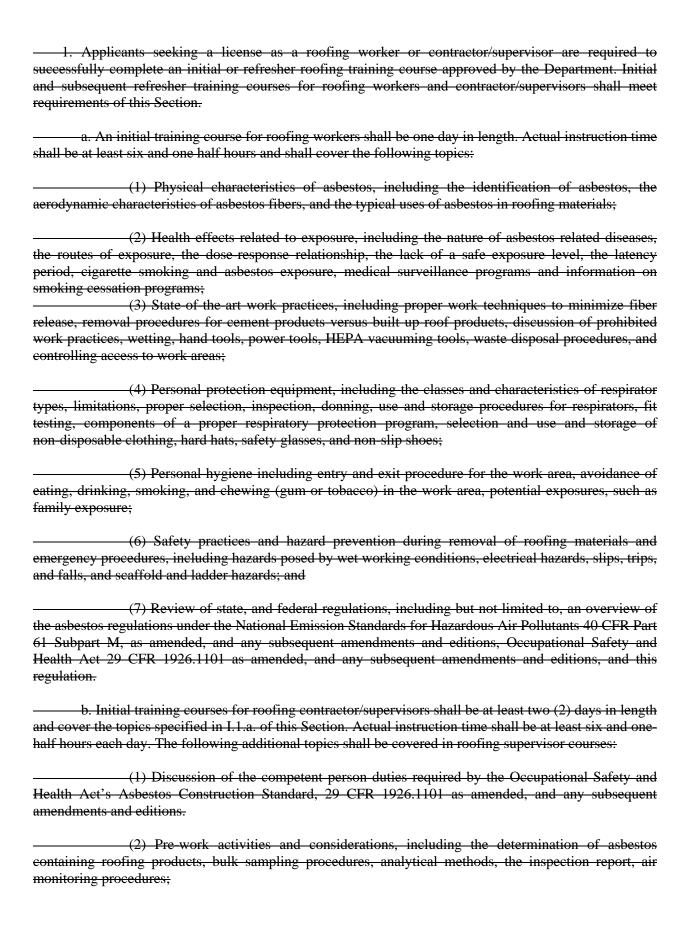
#### **SECTION XI. ROOFING PROJECTS.**

A. Applicability. The owner/operator of a roofing project, at a regulated facility, involving the removal of asbestos containing roofing materials shall comply with the requirements of this section. Requirements described in other sections of this regulation shall not apply to roofing projects unless specifically referenced in this section.
1. No person or contractor shall engage in the abatement of regulated asbestos-containing roofing material unless trained to do so in accordance with a curriculum specified in Section XI.I., Requirements for roofing Training Courses.
2. All of Section I., Definitions and Section III., Licensing Requirements shall apply.
B. General Information
1. All of Section IV. General Requirements with the exception of air sampling shall be required.
2. A licensed consultant/roofing building inspector may perform duties of a building inspector as required under Section IV.B.1. thru 3.
C. Notification.
1. Notification requirements of Section X.B.1, shall apply for projects involving at least:
a. 5580 square feet of asbestos containing bituminous roofing material, where a rotating blade roof cutter or similar equipment is used in the removal process.
b. 160 square feet or 260 linear feet of asbestos cement shingle or other Category II roofing materials which are in poor condition or where the removal method will result in the material being erumbled, pulverized or reduced to a powder.
2. Provide the Department with prior notification for the removal of regulated asbestos containing roofing materials below the amounts defined in paragraph C.1.a. and b. of this section.
3. Provide the Department with a written request for disposal prior to transporting non-friable waste from the facility site.
4. Project fees in Section IV.I. shall apply.
D. Air Sampling and Analysis Procedures. No area air monitoring is required for roofing projects.

E. Work Practice Requirements.
1. The work practice and clean-up requirements of Section X.D. shall apply for all regulated asbestos containing roofing material.
2. Work practice requirements of Section XIV.C shall apply to all non-friable asbestos containing roofing material.  F. Disposal.
1. The disposal requirements of Section IV.H. shall apply for all regulated asbestos containing roofing waste material generated during roofing projects. However, in lieu of requirement IV.H.(7), metal dumpsters or containers in which RACM is temporarily stored at the abatement site shall be lined with 6-mil polyethylene sheeting to prevent contamination. The dumpster or container shall have impermeable covering over the waste to prevent wind dispersion of asbestos fibers, vandalism or other disturbance of asbestos waste. This covering shall be in place and securely attached to the dumpster or containers except during loading and unloading of asbestos waste.  2. The disposal requirements of Section XIV.D. shall apply for all non-friable asbestos containing roofing waste material generated during roofing projects.
G. Licensing.
1. Persons applying for a roofing license shall comply with all applicable requirements of Section III for workers and supervisors.
2. Persons applying for roofing contractor/supervisor or worker licenses shall successfully complete the accreditation curriculum specified in paragraph I. of this Section.
H. Training Course Instructor Qualifications.
1. Any person seeking approval as an instructor for courses covered by this Section shall meet the applicable requirements as specified herein.
2. Instructors who will teach segments of training courses covered by this Section other than work practice topics, hands on exercises or field trips shall meet the following requirements:
a. Be a trained professional actively working in the field of expertise in which training is conducted; and
b. Have a minimum of a high school diploma or equivalent.
3. Instructors who teach work practice and hands on topics in Department-approved roofing worker or roofing contractor/supervisor initial and refresher courses shall meet all of the following requirements:
<ul> <li>a. Successfully complete either an approved initial asbestos supervisor or asbestos roofing supervisor's course, and subsequent annual refresher courses;</li> <li>b. Either document: at least three months work experience as an roofing supervisor or foreman, or meet the requirements for an instructor per Section XV.E.1. and 2.</li> </ul>
e. Successfully complete an initial or refresher building inspector course.

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I. Requirements for Asbestos Roofing Training Courses.



(3) Assessment of the work area, including isolating the work area, considerations if the work area is adjacent to an occupied area, and items requiring special protection;
(4) Site consideration and preparations, including the regulated areas, barricade set up, warning signs; and
(5) Supervisory techniques, worker training, cleanliness of the job site, record keeping and documentation requirements.
(6) The state of the art work practice topics shall include a segment of hands on activities, which allows the students an opportunity to use and handle equipment found on asbestos roofing projects. The hands on activities shall be a minimum of 2 hours for roofing worker course and 4 hours for the roofing supervisor course.
c. The refresher training course for roofing workers shall be at least one half day in length. The refresher roofing supervisor course shall be at least one day in length. These courses shall review and discuss changes in the Federal and State regulations, developments in the state of the art procedures, and key aspects of the initial courses as provided in I.1.a. and b. of this Section.
J. The requirements of Section XV for certificates, notification and reporting, record keeping, testing,

SECTION XI. SMALL PROJECTS, formerly known as SECTION VI, has been moved and revised as follows:

foreign language instruction, effectiveness of training, course approval and periodic audits shall apply to

### SECTION XI. ROOFING PROJECTS SMALL PROJECTS.

roofing courses and course providers trainers.

#### A. Applicability.

The notification/application, work practice, air sampling, clean-up, and disposal requirements of this Section shall apply to each abatement project where the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is more than 25 but less fewer than 260 linear feet on pipes, or more than 25 but less fewer than 160 square feet on other facility components, or more than 10 ten but less fewer than 35 cubic feet of RACM off of facility components such that area or length could not be measured prior to abatement.

#### B. Notification/Application.

In a facility being renovated subject to this Section, the owner/operator shall provide the Department with written notification prior to any abatement and pay all applicable fees as follows:

- 1. Deliver the notification/application by U.S. Postal Service or commercial delivery service, facsimile transmission, by hand or by other methods deemed acceptable to by the Department.
- 2. Postmark or deliver the notice at least five calendar four working days before asbestos stripping or removal work or any other activity begins that would break up, dislodge, or similarly disturb regulated asbestos-containing material RACM.
- 3. Update/revise the notification/application and pay appropriate fees as required when any previously notified information changes and pay additional project feesas necessary, including but not

limited to: when the amount of asbestos affected changes increases or decreases more than ten percent (10%), when the project start or completion date changes, and/or when the disposal site changes increases or decreases more than ten percent (10%), and/or the project has been cancelled. The owner/operator shall notify the Department by telephone and follow up in writing as soon as possible before, but not later than, the following working day. When the amount of asbestos affected changes such that the total quantity being abated qualifies as a NESHAP project, prior approval must be granted by the Department for work to proceed. 4. Notify the Department by telephone and follow up in writing as soon as possible but no later than, the originally notified start date when a project for which notification was sent has been canceled. 54. The Department may waive the five calendar four working days prior notice requirement on a case-by-case basis. C. Clearance Air Sampling and Analysis Procedures. 1. The facility owner shall ensure that clearance air monitoring sampling is performed in accordance with applicable requirements of the Air Sampling Section of this regulation. 2. The air sampler shall: a. For projects subject to 40 CFR Part 763, AHERA, as amended and any subsequent amendments or editions, conduct clearance air monitoring after abatement in areas to be reoccupied, including interior spaces, porticos and covered exterior walkways, and abatement on exterior portions of mechanical systems used to condition interior spaces. b. Follow the procedures specified in "Measuring Airborne Asbestos Following an Abatement Action," EPA Report 600/4-85-049 (1985), or an equivalent method acceptable to the Department, when conducting clearance air monitoring. c. Submit a written copy of the sampling procedures and clearance air monitoring results to the facility owner within five working days following the completion of the project. d. Report sampling procedures and clearance air monitoring results in writing to the Department upon request. e. Conduct clearance air monitoring only after the contractor has completed wet cleaning, and the area has completely dried and visually inspected. f. Conduct clearance air monitoring only after all interior wall, ceiling, and floor polyethylene sheeting has been removed. Critical barriers and established decontamination enclosure systems shall remain in place until the abated area has received final clearance. g. Collect clearance air samples in areas representative of the occupants' breathing zone. D. Work Practice and Clean-up Requirements. 1. An owner/operator engaged in a small asbestos abatement project shall: a. Construct critical barriers to prevent the potential release of asbestos fibers from within the work area.

b. Prevent contamination of carpet with asbestos containing materials ACM, or dispose of the carpet as asbestos-contaminated waste. c. Thoroughly wet all regulated asbestos containing materials RACM prior to removal and keep them it wet until disposal. d. Prevent track-out and leakage of RACM onto uncontaminated surfaces. e. Use HEPA vacuumHEPA vacuum equipment and wet-cleaning techniques to clean up the work area following abatement until there is no visible residue. f. Ensure that asbestos containing material ACM from within the work area is not permitted outside of the work area except in sealed, leak-tight containers. g. Ensure that any person exiting or any equipment or machinery being removed from the contaminated work area is thoroughly decontaminated. If equipment or machinery is not thoroughly decontaminated, it shall be sealed in leak-tight containers. No visible residue shall appear on the outside surface of the container. h. Ensure porous surfaces, which that have been stripped or cleaned of RACM are encapsulated to secure any residual fibers that may be present. The encapsulant must be chosen used to must be compatible with subsequent coverings. 2. Disposal. -a. The owner/operator shall comply with the disposal requirements of the Disposal Section-IV.H. of this regulation. shall apply. b. Contractors who wish to temporarily store regulated waste at any location other than the project site shall obtain written authorization from the Department prior to transporting the waste from the project site. To obtain written authorization from the Department, the contractor shall submit a written request describing the exact location where the waste will be stored, how it will be packaged, amount expected to be generated during the quarter, and how the accumulating waste will be secured until the end of the quarter. c. Each contractor approved to store asbestos waste shall maintain an asbestos waste log at the storage site and shall make it available for inspection upon request by Department representatives. The log shall include but is not limited to: the name and address of the facility being abated, amount and type

SECTION XII. MINOR PROJECTS, formerly known as SECTION VII., has been moved and revised as follows:

of asbestos containing material removed, date(s) of the removal, names of individuals who performed the

abatement, the temporary waste storage location, and the name of the landfill used for disposal.

#### SECTION XII. ENCAPSULATION AND ENCLOSUREMINOR PROJECTS.

SECTION XII.A. through XII.D., formerly known as SECTIONS VII.A. through VII.D., have been moved and revised as follows:

#### A. Applicability.

The notification, work practice, clean-up, and disposal requirements of this Section shall apply to each abatement project where the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is equal to or less fewer than 25 linear feet on pipes, or is equal to or less fewer than 25 square feet on other facility components, or is equal to or less fewer than 10 cubic feet of RACM off facility components where the area or the length or area could not be measured prior to abatement.

#### B. Notification/Application.

In a facility being abated subject to this Section:

- 1. The owner/operator shall provide the Department with a written application at least four two working days notification-prior to any abatement and pay all applicable fees as follows:

  a. Acceptable delivery of the notification shall be by U.S. Postal Service, commercial delivery service, facsimile transmission, by hand or by other methods deemed acceptable to by the Department.
- b. Update/revise the notification/application and pay appropriate fees as required when any previously notified information changes, including but not limited to: when the amount of asbestos affected changes increases or decreases more than ten percent (10%), when the project start or completion date changes, and/or when the disposal site changes, and/or the project has been cancelled; or
- c. The owner/operator shall Nnotify the Department by telephone and follow up in writing as soon as possible before, but not later than, the original start date when a project for which the application notification was made has been canceled; or the following working day. When the amount of asbestos affected changes such that the total quantity being abated qualifies as a small or NESHAP project, prior approval must be granted by the Department for work to proceed.
- 2. Facility employees who do not meet the definition of a contractor as defined by this regulation, or a contractor who has obtained a temporary storage license may maintain a log of all minor abatements performed during a quarter, report them to the Department within 30 calendar days of after the end of the quarter, and pay applicable project fees. The log shall include, but is not limited to: the name and address of the facility being abated, amount and type of asbestos containing material ACM removed, date(s) of removal, names of individuals who performed the abatement, exact location for temporary storage of asbestos wastes, and the name of the landfill used for disposal.

#### C. Air Sampling and Analysis Procedures. Air monitoring is not required for minor projects.

The facility owner shall ensure that air sampling is performed in accordance with applicable requirements of the Air Sampling Section of this regulation.

#### D. Work Practice and Clean-up Requirements.

- 1. An owner/operator engaged in a minor asbestos abatement project shall:
- a. Construct critical barriers to contain asbestos fibers released within the work area.
- b. Wet all regulated asbestos containing materials RACM prior to removal and during containerization for disposal in an approved landfill. and keep them wet until disposal.

c. Prevent track-out and leakage of RACM onto uncontaminated surfaces.
d. Use HEPA vacuum equipment and wet-cleaning techniques to clean up the work area following abatement until there is no visible residue.
e. Ensure that asbestos containing material ACM from within the work area is not permitted outside of the work area except in sealed leak-tight containers.
f. Ensure that any person exiting or any equipment or machinery being removed from the contaminated work area is thoroughly decontaminated. If equipment or machinery is not thoroughly decontaminated, it shall be sealed in a leak-tight containers. No visible residue shall appear on the outside surface of the container.
g. Ensure porous surfaces, which that have been stripped or cleaned of RACM are encapsulated to secure any residual fibers that may be present. The encapsulant used must be chosen to be compatible with subsequent coverings.
h. Containerize waste in appropriately labeled impermeable containers (6-mil polyethylene sheeting, bags, and/or fiber or metal drums), and store in an area whichthat is secured and locked.
i. Transport asbestos waste in a manner that does not release fibers into the air and dispose of at a landfill permitted to accept asbestos waste.
2. Disposal.
a.The owner/operator shall comply with the disposal-requirements of the Disposal Section-IV-H of this regulation-shall apply.
b. Contractors who wish to temporarily store regulated waste at any location other than the project site shall obtain written authorization from the Department prior to transporting the waste from the project site. To obtain written authorization from the Department, the contractor shall submit a written request describing the exact location where the waste will be stored, how it will be packaged, amount expected to be generated during the quarter, and how the accumulating waste will be secured until the end of the quarter.
c. Each contractor approved to store asbestos waste shall maintain an asbestos waste log at the storage site and shall make it available for inspection upon request by Department representatives. The log shall include but is not limited to: the name and address of the facility being abated, amount and type of asbestos containing material removed, date(s) of removal, names of individuals who performed the abatement, exact location for temporary storage of asbestos wastes, and the name of the landfill used for disposal.
SECTION XIII., formerly known as SECTION VIII., has been moved and revised as follows:
<u>SECTION XIII. STANDARD FOR DEMOLITIONS</u> OPERATION AND MAINTENANCE ACTIVITIES.

# A. Applicability.

1. The notification/application, work practice, clean-up, and disposal requirements of this Section shall apply to the owner/operator of an operation and maintenance activity in which the amount of RACM

disturbed does not exceed that which can be contained in one glovebag or one 6 mil polyethylene bag measuring no greater than 60 inches in length and width, non-industrial facility owner/operator and the O&M personnel covered under the facility's group license.

2. Workers are limited to an activity in which the amount of RACM disturbed does not exceed that which can be contained in one glovebag or one 6-mil polyethylene bag measuring no greater than 60 inches in length and width.

#### B. Notification/Application.

In a facility being abated that is subject to this Section:

1. The non-industrial facility owner/operator shall provide the Department with written notification/application prior to any abatement and pay all applicable fees as follows:

a. Acceptable delivery of the notification shall be by U.S. Postal Service, commercial delivery service, facsimile transmission, by hand or by other methods deemed acceptable toby the Department.

b. Update the notification when any previously notified information changes.

c. Notify the Department by telephone and follow up in writing as soon as possible, but not later than, the original start date when a project for which notification was made has been canceled; or.

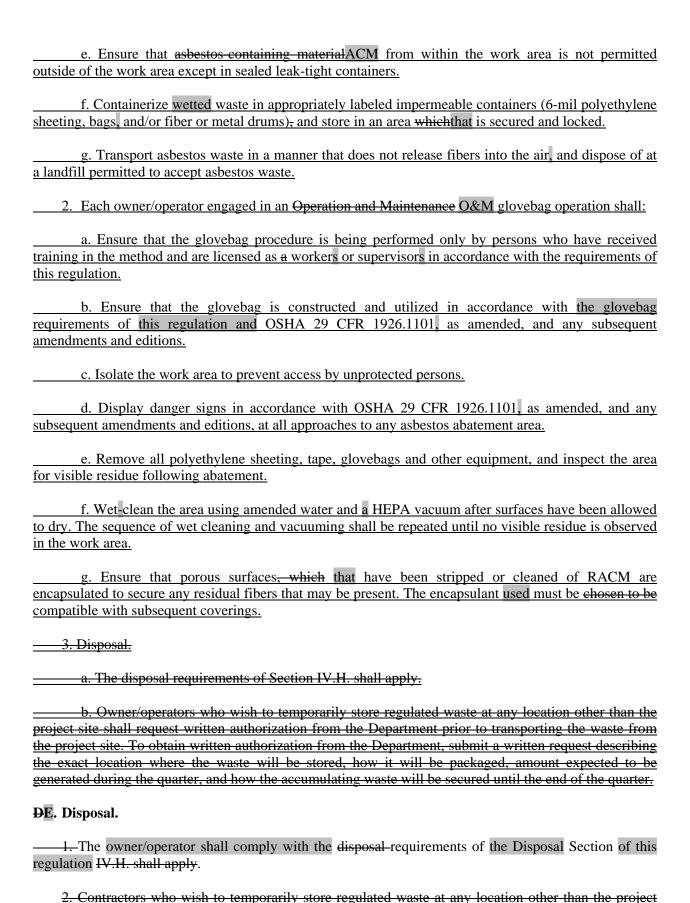
2. Alternately, Ffacility employees who do not meet the definition of a contractor as defined by this regulation, or a contractor who has obtained a temporary storage license may maintain a log of all minor abatements O&M activities performed during a quarter, report them to the Department within 30 calendar days of the end of the quarter, and pay applicable project fees. The log shall include, but is not limited to: the name and address of the facility being abated, amount and type of asbestos containing material ACM removed, date(s) of removal, names of individuals who performed the abatement, exact location for temporary storage of asbestos wastes, and the name of the landfill used for disposal.

#### C. Air Sampling and Analysis Procedures.

The facility owner shall ensure that sampling is performed in accordance with applicable requirements of the Air Sampling Section of this regulation.

#### **CD.** Work Practice and Clean-Up Requirements.

1. An owner/operator engaged in an operation and maintenance activity shall:
a. Construct critical barriers to prevent the potential release of asbestos fibers from within the
work area.
b. Wet all regulated asbestos containing materials RACM prior to removal and during
containerization for keep them wet until disposal at an approved landfill.
c. Prevent track-out and leakage of RACM onto uncontaminated surfaces.
<u> </u>
d. Use HEPA vacuum HEPA vacuum equipment and wet-cleaning techniques to clean up the
work area following abatement until there is no visible residue.



2. Confidence who wish to temporarily store regulated waste at any location other than the project

site shall obtain written authorization from the Department prior to transporting the waste from the project site. To obtain written authorization from the Department, the contractor shall submit a written request describing the exact location where the waste will be stored, how it will be packaged, amount expected to be generated during the quarter, and how the accumulating waste will be secured until the end of the quarter.

3. Each contractor approved to store asbestos waste shall maintain an asbestos waste log at the storage site and shall make it available for inspection upon request by Department representatives. The log shall include but is not limited to: the name and address of the facility being abated, amount and type of asbestos containing material removed, date(s) of removal, names of individuals who performed the abatement, exact location for temporary storage of asbestos wastes, and the name of the landfill used for disposal.

SECTION XIV., formerly known as SECTION IX, has been moved and revised as follows:

## SECTION XIV. NON-FRIABLE PROJECTS GLOVEBAG TECHNIQUE.

## A. Applicability.

- 1. The requirements of this Section shall apply to the owner/operator of any NESHAP, Ssmall, Mminor, or operation and maintenance O&M abatement project when glovebag operations are implemented.
- 2. The owner/operator shall ensure that asbestos-containing waste from glovebag operations is wet at all times during abatement, storage, and transportation, and is deposited in a landfill approved or permitted to accept asbestos waste.

#### B. Preparation for Glovebag Operations.

Glovebag systems may be used to remove ACM from straight runs of piping, elbows, and other connections when performed in compliance with the provisions of this Section and OSHA 29 CFR 1926.1101, as amended, and any subsequent amendments and editions.

- 1. The owner/operator shall ensure that: a Tthe glovebag is constructed and utilized in accordance with the following requirements of OSHA 29 CFR 1926.1101, as amended, and any subsequent amendments and editions.
- b.a. The work area is isolated to prevent access by unprotected persons.
- e.b. Danger signs are displayed at all approaches to any asbestos abatement area in accordance with OSHA 29 CFR 1926.1101, as amended, and any subsequent amendments and editions.
- <u>dc.</u> The glovebag procedure is performed only by persons who have received training in the method and are licensed as workers or supervisors in accordance with the requirements of this regulation.
  - d. At least two persons shall perform glovebag removal operations.
  - e. Each glovebag shall be made of 6 mil thick plastic and shall be seamless at the bottom.
- f. Each glovebag used on elbows and other connections must be designed for that purpose and used without modifications.

- g. Each glovebag shall be installed so that it completely covers the circumference of pipe or other structure where the work is to be performed.
  - h. Each glovebag shall be smoke-tested for leaks and any leaks sealed prior to use.
  - i. A glovebag shall be used only once and may not be slid or moved.
  - j. Each glovebag shall not be used on surfaces whose temperature exceeds 150 degrees Farenheit.
- k. Prior to disposal, each glovebag shall be collapsed by removing air within it using a HEPA vacuum.
- 1. Before beginning the operation, loose and friable material adjacent to the glovebag or glovebox operation shall be wrapped and sealed in at least two layers of 6-mil polyethylene.
- m. Where a system uses an attached waste bag, such bag shall be connected to the collection bag using a hose or other material that shall withstand pressure of ACM waste and water without losing its integrity;
- n. A sliding valve or other device shall separate the waste bag from the hose to ensure no exposure when waste bag is disconnected.

#### C. Negative Pressure Glovebag Systems.

- 1. Negative pressure glovebag systems shall be used to remove ACM from piping.
- 2. In addition to the requirements for glovebag systems in Section B. above, negative pressure glovebag systems shall have a HEPA vacuum attached to the glovebag/box to prevent collapse during removal.
- 3. A HEPA vacuum shall be used to prevent collapse of bag during removal and shall run continually until completion of operation, at which time the pipe shall be encapsulated, and the bag and ACM shall be isolated prior to removal of the bag from the pipe.

#### D. Negative Pressure Glovebox Systems.

Negative pressure gloveboxes may be used to remove ACM from pipe runs when the following work practices are utilized:

- 1. Gloveboxes shall be constructed with rigid sides and made from metal or other material that can withstand the weight of the ACM and water used during removal;
  - 2. A negative pressure generator shall be used to create negative pressure in the system;
  - 3. An air filtration unit shall be attached to the box;
  - 4. The box shall be fitted with gloved apertures:
    - a. An aperture at the base of the box shall serve as a bagging outlet for waste ACM and water;
    - b. A back-up generator shall be present on site;

- c. Waste bags shall consist of 6 mil or thicker plastic and be double-bagged before they are filled;
- 5. At least two persons shall perform the removal;
- 6. The box shall be smoke-tested for leaks and any leaks sealed prior to use;
- 7. Loose or damaged ACM adjacent to the box shall be wrapped and sealed in at least two layers of 6-mil or thicker plastic prior to the job or otherwise made intact prior to the job; and
  - 8. A HEPA filtration system shall be used to maintain pressure barrier in the box.

#### **CE.** Air Sampling and Analysis Procedures.

- 1. Background and daily area monitoring NESHAP shall be performed for all NESHAP glovebag/glovebox projects. Per Section V.C. Personnel air sampling in the worker's breathing zone may be used to satisfy the requirement for daily area monitoring.
- 2. Non-aggressive Phase Contrast Microscopy (PCM) Celearance air monitoring shall, at a minimum, be required for NESHAP and small asbestos glovebag or glovebox projects.
- a. Except for projects subject to 40 CFR Part 763 (AHERA) as amended and any subsequent amendments or editions, non-aggressive clearance air monitoring shall be acceptable following glovebag use for NESHAP and small projects unless the owner and/or operator fails to comply with paragraph D.2. of this section.
- 3.b. If the owner and/or operator fails to comply with paragraph D.2. F1. of this sSection, or lift personnel fiber counts exceed the PCM clearance standard of 0.01 F/ee fibers per cubic centimeter, then aggressive clearance air monitoring shall be performed. per Section V.C.3. for NESHAP projects, and Section VI.C.2.b. for small projects.

#### **DF.** Glovebag/Glovebox Work Practices.

- 1. The owner and/or operator shall ensure that asbestos containing waste from glovebag operations is wet at all times during abatement, storage, and transportation, and is deposited in a landfill approved or permitted to accept asbestos waste.
- 21. Use of the glovebag shall be terminated, and cleanup procedures per contained in this Section D.3.b. shall be implemented, and clearance by TEM analysis performed if the owner/operator:
  - a. fFails to keep RACM in the glovebag/glovebox-;
  - b. #Fails to keep RACM adequately wet.;
- c. dDisturbs or dislodges RACM outside of the glovebag/glovebox-; and/or
  - d. eExperiences glovebag failure, including any breach in the glovebag/glovebox.
- 32. Glovebag/Glovebox Clean-up. Following removal, the owner/operator shall ensure that:
- ea. Porous surfaces that have been stripped or cleaned of RACM are encapsulated to secure any residual fibers that may be present prior to removing the glovebag or glovebox from the abated pipe. The

encapsulant used must be compatible with subsequent coverings. ba. All polyethylene sheeting, tape, glovebags or gloveboxes and other equipment must be are removed and the area inspected for visible residue. cb. Wet-cleaning using amended water is performed, followed by HEPA-vacuumingHEPA vacuuming after surfaces have been allowed to dry. The sequence of wet cleaning and vacuuming shall be repeated until no visible residue is observed in the work area. e. Porous surfaces, which have been stripped or cleaned of RACM, are encapsulated to secure any residual fibers that may be present. The encapsulant must be chosen to be compatible with subsequent coverings. d. When required, final TEM air clearance shall be performed following visual clearance. 4G. Disposal. All applicable The disposal requirements of this regulation Section IV.H. shall apply. SECTION XV., formerly known as SECTION XIV., has been moved and revised as follows:: SECTION XV. TRAINING COURSE AND INSTRUCTOR REQUIREMENTS NON-FRIABLE PROJECTS. A. Applicability. The requirements of this Section shall apply to the owner/operator of any renovation at any regulated facility where the ACM being removed from that facility remains non-friable.

# B. Notification/Application.

- 1. Each owner/operator shall:
  - a. Contact the landfill to ensure acceptance of non-friable ACM waste.
- b. Provide the Department with a written application request for disposal and obtain a Department-issued abatement license for the project four (4) working days prior to beginning abatement for NESHAP sized projects of 160 sf or 260 Lf. The license shall be maintained at the project site for the duration of the project. transporting waste from the facility site.
- c. For all other projects, Pprovide the following information in the a written request: application prior to disposal.
- d. Facilities and those in possession of a temporary asbestos storage containment area license may notify the Department quarterly.
  - e. Prior to disposing of a non-regulated residential structure, provide a written application to the Department.
  - f. Applications must also be submitted for projects where waste will be disposed of out-of-state.

# **DANGER**

# **CONTAINS ASBESTOS FIBERS**

# AVOID CREATING DUST

# CANCER AND LUNG DISEASE HAZARD.

4. The owner/operator shall:
a. Obtain a waste shipment record or other shipment manifest at the landfill to document disposal of all asbestos waste.
b. Ensure that a waste shipment record or other shipment manifest is signed by the landfill
operator; and
c. Submit a copy of the waste shipment record or other shipment manifest to the Department within 30 working days of project after abatement completion.  SECTION XVI., formerly known as SECTION XIII., has been moved and revised as follows:
SECTION XVI. STANDARD FOR DEMOLITIONS.
A. Applicability.
The requirements of this Section shall apply to the owner/operator of a regulated facility to be demolished.
B. Notification/Application.
1. Each owner/operator of a demolition to which this Section applies shall:
a. ProvideSubmit to the Department with a written DHEC demolition application notice of intent to demolish at least 10 working days in advance of the proposed demolition start date.
b. Acceptable Ddelivery of the application notice shall be by U.S. Postal Service, commercial delivery service, by hand or by other methods deemed acceptable to by the Department.
c. Acceptable methods of payment shall be by check or money order made payable to SCDHEC, credit card (VISA, MasterCard, or Discover), and cash.
bd. Submit a written-notification of the demolition project license application for each separate facility which that includes all information required on the application form. in Section V.B.
ee. IncludeSubmit a complete, legible copy of the building inspection report, which ismust be less than three years old, for each facility to be demolished.
2. Notification requirements of Section XIII.B.1.a. shall apply Obtain an asbestos demolition license for including any facility, in which regardless of whether the required building inspection indicates the presence of there are no asbestos containing materials present ACM.
3. When a demolition will begin on a date earlier than the previously notified start date, the facility owner/operator shall provide the Department with a written notification of the new start date at least 10 working days-before the demolition will begin prior to the previously notified demolition start date. The Department may waive this requirements on a case by case basis, although the owner/operator shall provide all required information prior to commencing any abatement or demolition activities.
<ul><li>4. The owner/operator of a demolition operation covered by this section shall:</li><li>a. Notify the Department by telephone—as soon as possible before, but no later than the original</li></ul>
an 1.0 mg and Department of telephone as soon as possible before, but no later than the original

start date when the demolition will begin on a date later than the previously-notified start date.

- b. Provide the Department with a revised written notice application of the new start date as soon as possible before, but no later than, the original previously-notified start date. Acceptable delivery of the notice shall be by U.S. Postal Service, commercial delivery service, by hand or by other methods acceptable to the Department.
- c. Provide the Department with an updated revised written notice notification/application of the new completion date as soon as possible before, but no later than one working day following the completion of the project when the asbestos stripping or removal operation covered by this Section will end on a date earlier than contained in the initial notification and in the asbestos project license issued by the Department. Acceptable delivery of the updated notice is by the U.S. Postal Service or commercial delivery service, by hand, or by other methods acceptable to the Department immediately when any information pertaining to the demolition project changes, including but not limited to, the start and/or completion date, the demolition contractor, or the landfill.
- d. Provide the Department with written notification of the new completion date as soon as possible before but not later than the original completion date when the asbestos stripping or removal operation covered by this Section will end on a date later than contained in the initial notification and in the asbestos project license issued by the Department. Acceptable delivery of the updated notice is by the U.S. Postal Service or commercial delivery service, by hand, or by other methods acceptable to the Department.
- 5. Any Rregulated facility ies being demolished under order of a State or local government agency because the facility is structurally unsound, in imminent danger of collapse, or and is a threat to public health or safety-threat shall may be exempt from the 10-working day notification requirement. However, the owner/operator shall submit a complete demolition license application and written justification documents notification to the Department as early as possible before, but not later than, the following work day after the demolition begins for approval prior to commencing the demolition activities.
- a. The notice application shall include all of the following information required by Section V.B.4.a. n. of this regulation.:
  - (1) Indication whether the notification is an original, revision, or cancellation.
  - (2) Name, address, and telephone number of the owner/operator.
  - (3) Indication that demolition is the type of operation.
- (4) Description of the facility or affected part of the facility, including the square footage, number of floors, age, and prior, present, and intended use of the facility.
- (5) Description of the procedures and analytical methods used to detect the presence of ACM (regulated and nonregulated), date of inspection, and name, address, telephone number, and license number of the building inspector.
- (6) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state of the facility being demolished or renovated.
  - (7) Scheduled starting and completion dates of asbestos renovation or demolition.

(8) Description of planned demolition work to be performed, emission control measure(s) to be employed, and a description of the affected facility or facility components.
(9) Description of the engineering controls and procedures to be used to comply with the work practice requirements of this regulation.
(10) Name and location of the waste disposal site where the regulated asbestos-containing waste material will be deposited. Regulated asbestos-containing waste must be deposited into a landfill approved or permitted to accept asbestos waste.
(11) Description of procedures to be followed in the event that unexpected RACM is found.
(12) Name, address, and telephone number of the waste transporter.
(13) Printed name and signature of the owner/operator submitting the notification and the date signed.
b. The removal work practice requirements of Section V.D.2 and the exemption from wetting requirements of Section IV.G. shall apply.
eb. The owner/operator shall submit to the Department a clear, legible copy of the signed order that contains all of the following information to the Department along with the notification completed demolition project application:
(1) The name, title, and authority of the State or local government representative who ordered the demolition;
(2) The date that the order was issued; and
(3) The date on which the demolition was ordered to begin; and.
(4) A clear, legible copy of the signed order.
C. Removal of ACM prior to Demolition.
1. Any demolition of a structure or portion of a structure—which that contains structural members or components composed of or covered by regulated asbestos containing material—ACM shall be preceded by removal of all such materials.
2. All asbestos-containing materials—ACM, with the exception of those material referenced in paragraph E. of this Section, shall be removed in accordance with work practice requirements for applicable NESHAP, small, or minor projects prior to demolition.
D. Air Sampling and Analysis Procedures.
1. Background Air monitoring is not required during a demolition except when necessary due to an extenuating circumstance and/or required by the Department.
2. The owner/operator shall ensure that daily area air monitoring is performed. Personal air monitoring performed in compliance with OSHA 29 CFR 1926.1101, as amended and any subsequent

amendments and editions, and OSHA 29 CFR 1910.1001, as amended and any subsequent amendments and editions, may be used to satisfy this requirement when performed by a person licensed as an air sampler or who is covered under a Group license issued by the Department. 3. Clearance air monitoring is not required following ACM removal activities conducted for demolition purposes except when the area is to be utilized by unprotected personnel prior to demolition. 4. Visual inspection as indicated in EPA report 600/4-85-049 (1985) or an equivalent method acceptable to the Department must be performed by the facility owner or the owner's representative upon completion of the ACM removal. 5. Alternative work practices may be approved by the Department on a case-by-case basis. E. Exemptions from Removal of ACM prior to Demolition. The following categories of asbestoscontaining materials may be left in place during demolition:. 1. ACM on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition. 2. RACM which was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, cannot be safely removed. If not removed for safety reasons, all exposed RACM and any asbestos-contaminated debris must be treated as regulated asbestoscontaining waste material. 3. Category I and Category II nonfriable ACM (such as tape, mastic, glue, and adhesives) mastic, glue, and adhesive ACM which is not friable or in poor condition, and where the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition operations. **FE.** Disposal of Demolition Debris. 1. Waste whichthat does not contain asbestos may be disposed of as construction debris at a landfill approved or permitted to accept the such waste. 2. Debris containing non-friable asbestos-containing materials which remains in place as allowed under Part E of this Section shall be disposed of at a landfill permitted or approved to accept the waste, and may be transported and disposed of in bulk. 3. The following procedures shall be utilized in the handling of non-friable ACM: a. The asbestos containing debris shall be adequately wet at all times after demolition. b. The asbestos-containing debris shall be adequately wet during the handling and loading of the waste for transport to the disposal site 4. If at any point during handling and disposal, previously non friable asbestos containing materials become friable, then all State and Federal handling and disposal requirements for RACM shall be followed and the Department notified of the change.

State and Federal handling and disposal requirements for RACM shall be followed.

5. If during the handling of asbestos-containing demolition debris, waste consolidation measures including grinding, crushing, compacting or recycling by mechanical or manual methods are utilized, all

62. The owner/operator shall comply the the requirements of the Disposal Section of this regulation and shall ensure that asbestos-containing or asbestos-contaminated waste materials are not burned or recycled.

#### **GF.** Project License Fees.

- 1. The Department shall charge a fee of \$50.00 to issue a project license for demolition projects.
- 21.A project license is required for every facility that is to be demolished, including any facility in which the those that have been destroyed by fire or those whose required building survey indicates there are is no asbestos-containing materials ACM present.
- 32. The Department shall not issue a project license for a demolition until all requested information has been submitted and reviewed, and all applicable fees have been paid.
- 43. Fees shall not be refunded for projects for which the Department has issued a project license.
- 54. A project license that has been issued shall automatically become invalid if an instrument of payment is returned for insufficient funds, and in which case the licensee shall be subject to enforcement action for operation without a valid license.

SECTION XVII., formerly known as SECTION X., has been moved and revised as follows:

# SECTION XVII. REPRIMANDS, SUSPENSIONS AND REVOCATION OUTDOOR REMOVAL PROJECTS.

#### A. Applicability.

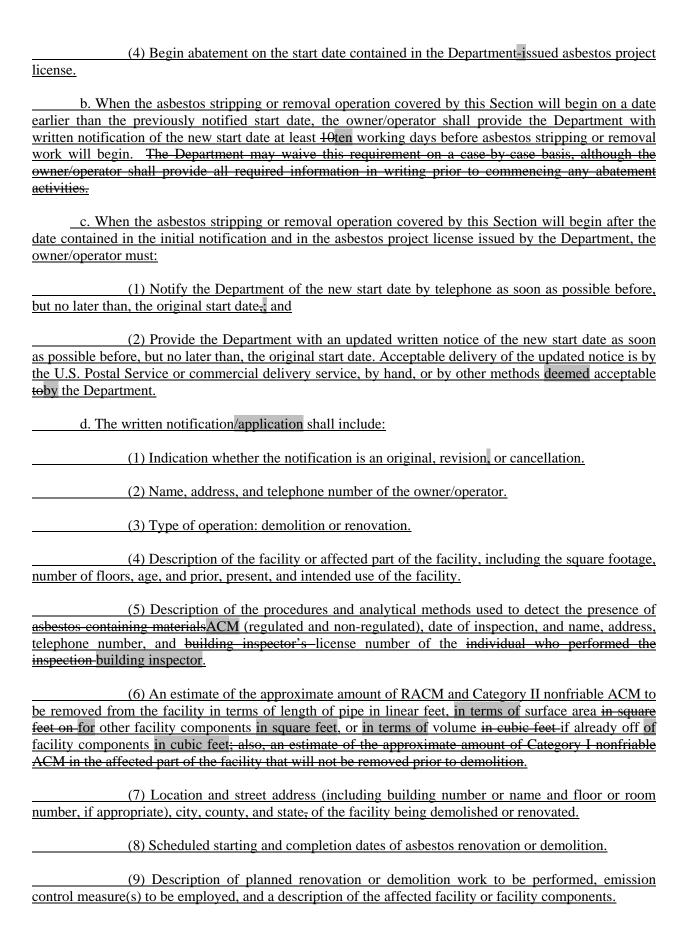
request.

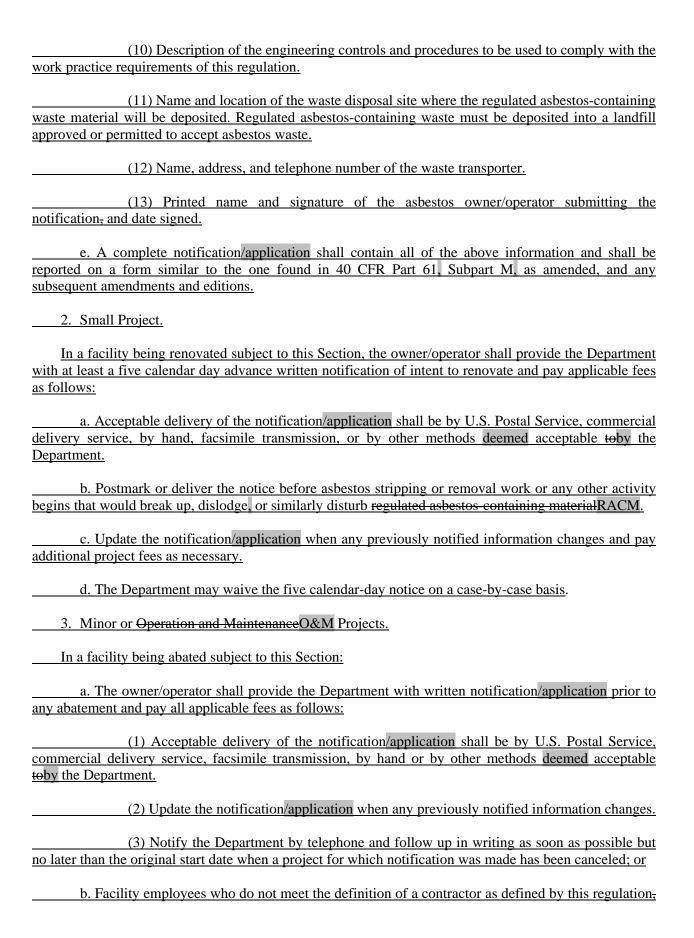
The notification, work practice, clean-up, and disposal requirements of this Section shall apply to each owner/operator of any regulated Operation and Maintenance O&M or Mminor, Ssmall or NESHAP outdoor renovation.

# B. Notification/Application.

1. NESHAP Project.

a. Each owner/operator of a renovation or demolition operation to which this Section applies
shall:
(1) Provide the Department with written notification/application at least 10 ten working
days prior to any renovation or demolition and pay all applicable project fees. Acceptable delivery of the
notification and fee payment is by U.S. Postal Service or commercial delivery service, by hand, or by
other methods deemed acceptable to by the Department.
(2) Update the notification/application and pay appropriate fees as necessary, when any
previously notified information changes, including but not limited to, when the amount of asbestos
affected changes, or when the project start or completion date changes, or when the disposal site changes.
(3) Provide the Department with a legible copy of the building inspection report upon





or a contractor who has obtained a temporary storage license may maintain a log of all minor abatements performed during a quarter, report them to the Department within 30 calendar days of the end of the quarter, and pay applicable project fees. The log shall include, but is not limited to: the name and address of the facility being abated, amount and type of asbestos containing material ACM removed, date(s) of removal, names of individuals who performed the abatement, exact location for temporary storage of asbestos wastes, and the name of the landfill used for disposal.

#### C. Air Sampling and Analysis Procedures.

- 1. For projects subject to 40 CFR Part 763, AHERA, as amended, and any subsequent amendments or editions, the facility owner shall ensure that a licensed air sampler performs clearance air monitoring after abatement in areas to be reoccupied, including porticos and covered exterior walkways, and abatement on exterior portions of mechanical systems used to condition interior spaces.
- 2. No background or daily area a Air monitoring is not required for Outdoor Projects that are not subject to EPA 40 CFR Part 763, AHERA regulation.

D. Work Practice Requirements.
1. Preparation.
The owner/operator shall minimize, to the extent reasonable and necessary, the exposure to persons downwind of the project.
2. Removal.
a. Wet removal methods shall be used.
b. There shall be no release of visible emissions during preparation, removal, or cleanup.
3. Clean-up.
a. Following removal, the owner/operator shall ensure that:
(1) The abated area is thoroughly cleaned using wet methods and amended water and surfaces have been allowed to dry.
(2) Once dry, the abated area is vacuumed using a vacuum equipped with HEPA cartridges or filters.
(3) The sequence of wet cleaning and vacuuming is repeated until no visible residue can be observed.

shall ensure that a coat of encapsulant is applied to the abated surface to secure any residual fibers that may be present. The encapsulant chosen must be chosen to be compatible with subsequent coverings.

b. The facility owner shall ensure that the work area is inspected for any remaining visible

c. For porous surfaces which that have been stripped or cleaned of RACM, the owner/operator

residue. Evidence of contamination will necessitate additional cleaning by the contractor.

## E. Disposal.

- 1. The disposal requirements of the Disposal Section IV.H. of this regulation shall apply to outdoor projects.
- 2. Contractors who wish to temporarily store regulated waste at any location other than the project site shall obtain written authorization from the Department prior to transporting the waste from the project site. To obtain written authorization from the Department, the contractor shall submit a written request describing the exact location where the waste will be stored, how it will be packaged, amount expected to be generated during the quarter, and how the accumulating waste will be secured until the end of the quarter.
- 3. Each contractor approved to store asbestos waste shall maintain an asbestos waste log at the storage site and shall make it available for inspection upon request by Department representatives. The log shall include but is not limited to: the name and address of the facility being abated, amount and type of asbestos containing material removed, date(s) of removal, names of individuals who performed the abatement, exact location for temporary storage of asbestos wastes, and the name of the landfill used for disposal.

SECTION XVIII., formerly known as SECTION XII., has been moved and revised as follows:

#### SECTION XVIII. ENCAPSULATION AND ENCLOSURE.

# A. Applicability.

- 1. The notification/application, air sampling, work practice, clean-up, and disposal requirements of this Section shall apply to each owner/operator engaged in an encapsulation or enclosure operation subject to the requirements of this regulation, where mechanical sprayers will be utilized and the potential to disturb RACM will involve amounts greater than 160 square or 260 linear feet of surfacing materials or thermal system insulation.
- 2. Surfaces whichthat have been previously coated or treated with an encapsulant and whichthat are not "in poor condition" are exempt from the requirements of this Section.

## **B.** Notification/Application.

- 1. In a facility with regulated asbestos RACM being encapsulated, the owner/operator shall:
- a. Provide the Department with written notification/application at least 10ten complete working days prior to beginning any encapsulation activities, where mechanical sprayers will be utilized and the potential to disturb RACM will involve amounts greater than 160 square or 260 linear feet of surfacing materials or thermal system insulation. The Department may waive this requirement on a case by-case basis, although the owner/operator shall provide all required information prior to commencing encapsulation activities.
- b. Notify the Department as soon as possible by telephone and follow-up in writing when any previously notified information changes or when a previously notified project has been canceled.
- 2. Acceptable delivery of notification/application shall be by U. S. Postal Service, commercial delivery service or facsimile transmission, by hand, or by other methods deemed acceptable toby the Department.

C. Air Sampling and Analysis Procedures.
1. Background Monitoring.
a. Background ambient air sampling shall be required, only when the conditions of B.1.a. above
<u>exist.</u>
b. A sufficient number of At least five air samples shall be collected prior to the start of abatement activities in order to obtain an index of background airborne fiber concentrations.
c. Representative samples should be taken both inside and outside the work area within the facility to establish existing ambient air levels under normal activity conditions.
d. The air sampler shall document any variations and indicate the reasons for doing sojustifications for the variances, and shall provide the information to the Department upon request.
2. Clearance.
The owner/operator shall ensure that non-aggressive TEM clearance air monitoring is conducted prior to re-occupancy of any area that has been encapsulated.
D. Work Practice Requirements.
1. Preparation.
a. The owner/operator of an encapsulation or enclosure operation shall:
(1) Define the work area using barrier tape and danger signs in accordance with OSHA 29 CFR 1926.1101, as amended, and any subsequent amendments and editions.
(2) Shut down, lock, and tag out all HVAC equipment in or passing through the work area.
(3) Remove existing filters and dispose of as asbestos-containing waste.
(4) Securely seal all intake and exhaust openings and any seams in system components with 6-mil or thicker polyethylene sheeting and tape.
(5) Securely seal each opening between the work area and uncontaminated areas, including but not limited to windows, doorways, elevator openings, corridor entrances, drains, ducts, electrical outlets, grills, grates, diffusers, and skylights, with a critical barrier consisting of at least one sheet of 6-mil or thicker polyethylene sheeting and tape.
(6) Thoroughly clean, and remove all movable objects from the work area.
(7) Thoroughly clean, then cover and secure all non-movable objects in the work area
with at least one layer of 4-mil or thicker polyethylene sheeting.
(8) Cover and secure all surfaces not being encapsulated or enclosed with at least one layer of 4-mil polyethylene sheeting for walls or ceilings and 6-mil polyethylene sheeting for floors.

2. Encapsulation/Enclosure Procedures.
a. During any encapsulation of regulated asbestos-containing materials RACM, the owner/operator shall ensure that:
(1) The encapsulant chosen for use is compatible with the substrate to which it will be applied, and is appropriate for the application intended.
(2) When airless sprayers are utilized, nozzle pressure shall be adjusted between 400 and 1,500 pounds per square inch (psi).
(3) Loose, damaged, or fallen RACM is cleaned immediately using wet methods and HEPA vacuumingHEPA vacuuming.
(4) RACM is not tracked from the work area onto uncontaminated surfaces.
(5) Once all encapsulated surfaces have completely dried, each surface is wet wiped or <u>HEPA-vacuumed</u> HEPA vacuumed.
b. During any enclosure of regulated asbestos containing materials RACM, the owner/operator shall ensure that:
(1) The enclosure is constructed air-tight so as to prevent the escape of airborne asbestos fibers.
(2) Loose, damaged, or fallen RACM is cleaned immediately using wet methods and HEPA vacuuming HEPA vacuuming and is properly packaged for disposal.
(3) RACM is not tracked from the work area onto uncontaminated surfaces.
(4) Wet methods and HEPA vacuums are used to clean any fallen RACM immediately.
3. Disposal.
The requirements of the Disposal Section IV.H. of this regulation shall apply.
SECTION XIX., formerly known as RECORDS, has been renamed REQUIREMENTS FOR TRAINING

COURSES, INSTRUCTORS, AND TRAINING PROVIDERS.

# SECTION XIX. RECORDS REQUIREMENTS FOR TRAINING COURSES, INSTRUCTORS, AND TRAINING PROVIDERS.

SECTIONS XIX.A.1., XIX.A.2., XIX.A.3., XIX.A.4., XIX.A.6., XIX.A.8., and XIX.A.9., formerly known as SECTION III.B.2.i., III.A.6., IIIA.7., III.B.2.i.(3)., III.A.8., and III.A.9., respectively, have been moved and revised as follows:

## iA. Asbestos Training Course Licenses.

(1)1. An asbestos training course provider who intends to present asbestos training courses within the State shall submit an application for approval, for each initial or refresher training course taught in any specific work practice or discipline to be taught, that contains all information necessary to verify qualifications as required in this Section XV of by thise regulation.

- 62. An Aasbestos training course providers must have a separate Department-issued license for each different initial or refresher training course taught in any specific work practice topic or discipline. Each course license is valid for an entire year, regardless of the number of times the course is taught during the year.
- 73. Licenses for asbestos training course providers will be restricted to courses approved by the Department in accordance with the requirements of Section XV of this regulation.
- 64. Each asbestos course license is valid for an entire one year from date of issue, regardless of the number of times the course is taught during the year.
- 5. Each individual seeking to teach or instruct any portion of any mandatory asbestos training course, regardless of discipline, must submit an instructor application that contains all information necessary to verify qualifications as required by this Section and be approved by the Department.
- 36. When an asbestos training course instructor seeks to conducts mandatory asbestos training courses in more than one discipline, documentation of course instructor qualifications for each discipline must be submitted as required in Section XV of this regulation. the instructor must be approved for each separate discipline by the Department.
- 7. Upon initial approval and licensing of an asbestos training course, the Department will audit and assess the training course provider an initial audit fee prescribed in this regulation.
- 8. Each asbestos training course approved and licensed pursuant to this regulation for the first time will be audited and assessed the initial audit fee prescribed in Section III.D.7 of this regulation. Each training course for which renewal of a license is sought. Upon renewal of a training course license, the training course provider will be assessed the annual license renewal fee prescribed in this regulation. Section III.D.7.
- 9. An asbestos training course must have a be approved and currently and valid licensed by the Department on the date that it was is taught to be acceptable as a basis for documentation that the person receiving the course certificate has completed the requisite training for asbestos accreditation in any specific work practice topic or discipline.

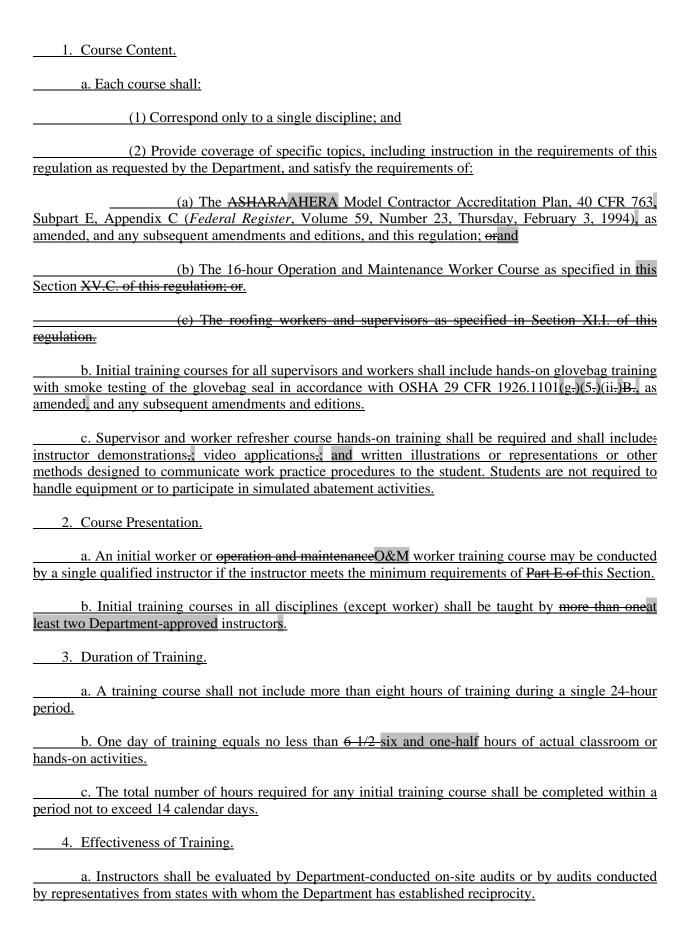
SECTION X.I.X.B. through X.I.X.J., formerly known as SECTION XV., has been moved and revised as follows:

#### B. Personnel Licensing Requirements.

A. In order for an initial or refresher training course in any discipline to be acceptable as a basis for personnel licensing pursuant to Section III of this regulation, the course must be licensed and instructor(s) must be approved by the Department.

#### **BC.** Department Approval.

To qualify for Department approval, an initial or refresher training course in any discipline shall meet the following requirements:



b. Training providers shall conduct courses in a physical environment conducive to learning (such
as a classroom).
c. The maximum enrollment of an initial asbestos course shall be 40 participating students.
d. There shall be no more than 10 students per instructor during all hands-on portions of initial training.
5. Foreign-Language Instruction.
a. Worker course instructors and students shall be fluent in the language in which the course is being taught.
(1) An English-speaking instructor shall not use an interpreter to instruct foreign-language trainees.
(2) Training courses in all disciplines (except worker) shall be conducted only in English.
b. The training provider shall provide trainees with course materials accurately translated into the language in which the course is being conducted.
6. Testing.
a. At the conclusion of each initial or refresher course, the training provider shall administer an examination in written or oral form to any trainee seeking to obtain a license to perform asbestos-related activities. Oral examinations are allowed to be administered only to individuals seeking training in the worker category.
b. The training provider shall administer an examination designed to test the trainees' familiarity with those issues relevant to the safe and proper performance of asbestos projects.
c. The training provider shall construct the course examination from a pool of validated questions and shall prepare a new examination for each course presentation.
d. The examination for roofing and operation and maintenance courses shall consist of a minimum of 50 multiple choice questions for supervisor discipline and 25 for the worker discipline.
ed. A trainee who fails to pass an initial examination with by not achieving a minimum score of 70 on a 100-point scale may be retested once.
f. A trainee who-Upon failsing to pass an examination on the second attempt, the trainee shall retake the entire training course before being allowed to retest for that discipline.
ge. The Department may approve alternative testing asit deems appropriate.
7. Certificates.
a. The training course provider shall issue a unique numbered certificate to each student who successfully completes the training course and passes the examination.
b. Each numbered certificate shall include the following information:

(1) Name and last four digits of the social security number of the trainee;
(2) Unambiguous course title indicating the discipline and specifying whether the training is an initial or refresher course;
(3) An unique certificate number;
(4) Inclusive dates of training course;
(5) Examination date:
(6) A statement indicating that the person whose name appears on the certificate has completed the training course and successfully passed an examination;
(7) For courses covered under 40 CFR Part 763, Subpart E, Appendix C, as amended, and any subsequent amendments and editions, a certificate expiration date that is one year after the date the course was completed and the applicable examination passed;
(8) The name, address, and telephone number of the training provider;
(9) The printed name and signature of the principal instructor-;
(10) Training course location; and
(11) A statement that the person receiving the certificate has completed the requisite training for asbestos accreditation under Title II of Section 206 of the Toxic Substances Control Act (15 U.S.C.A. Section 2646), with the exception of roofing and operation and maintenance(O&M) certificates.
8. Notifications and Reporting.
a. A training provider who intends to present a training course within the state shall notify the Department in writing at least ten calendar days prior to the first day of the course. The written notification must include the following information:
(1) Training provider name, address, telephone number, and contact person;
(2) Training course title;
(3) Inclusive dates of course and applicable exam;
(4) Daily start and completion times;
(5) Location and detailed directions to course facility;
(6) Language in which the course is taught;
(7) Names of the principal instructors; and
(8) A copy of the training course agenda. (If the agenda is identical to one previously submitted to the Department, an additional copy is not required.)

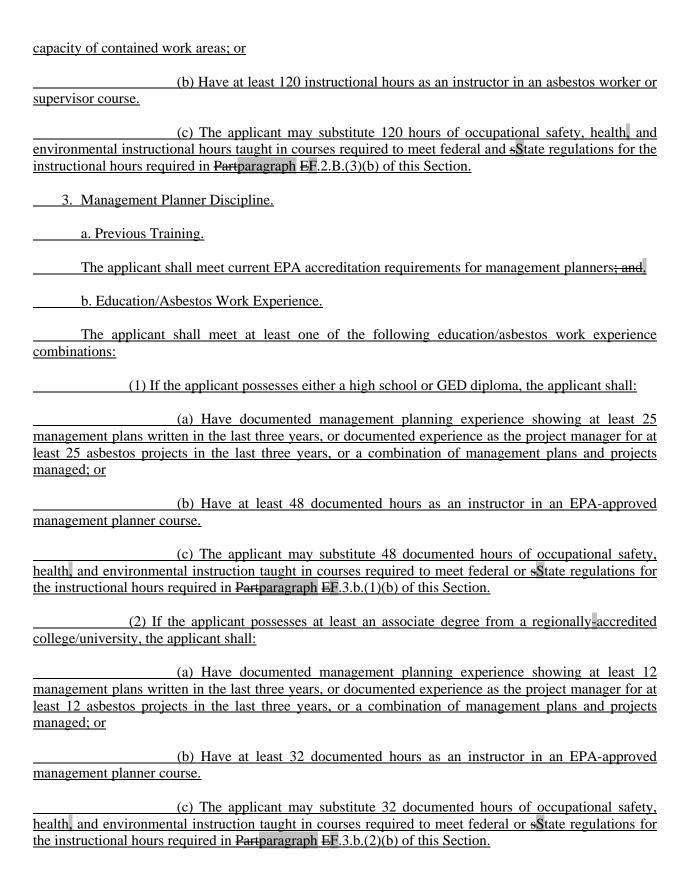
b. Within 7-seven days of conclusion of a training course presented within the State, the training provider shall submit the following information to the Department:
(1) Name of the course indicating whether initial or refresher:
(2) Inclusive dates of the course and examination;
(3) Names of all course instructors and topics taught;
(4) The course location:
(5) The name and social security number of every trainee, including names of those who did not successfully pass or otherwise complete the course;
(6) The unique certificate numbers of every trainee who completed the course and passed the examination; and
(7) Name, address, and telephone number of the training provider.
c. Out-of-state training providers shall submit any information specified in this Section XV.8. to the Department upon request.
d. Failure to submit a written course notification or course roster in the time-frame required in prescribed by this Section may result in the rejection of the course and certificates for licensure by the Department.
9. Record Keeping.
a. The person, sole proprietorship, public corporation, or incorporated entity operating as a training provider shall retain copies of records related to asbestos training, approved pursuant to this regulation for three years or for a period of time as defined in Title II, Section 206 of the Toxic Substances Control Act of the United States (15 U.S.C.A. Section 2646), as amended.
b. In the event thethat ownership of the sole proprietorship, public corporation, or incorporated entity operating as a training provider is transferred to a different owner, all records maintained during the previous three years shall be transferred and maintained by the new owner.
c. Records that must be maintained shall include those defined in Title II, Section 206 of the Toxic Substances Control Act of the United States (15 U.S.C.A. Section 2646), as amended, butand in all cases shall include the following:
(1) Course curriculum materials;
(2) Examinations and scores of all persons taking who have taken examinations;
(3) Instructor applications and resumes;
(4) Training course approval applications;
(5) Rosters of individuals taking training courses;

(6) Copies of training course notifications; and
(7) Copies of all correspondence with federal and/or state accreditation agencie regarding instructor and training course approvals, disapprovals, suspensions, or audits.
CD. Operation and Maintenance (O&M) Worker Course.
1. An initial and refresher operation and maintenance O&M training course shall be at least 16 hour in length and shall provide, at a minimum, information on all of the following topics:
a. The physical characteristics of asbestos, including fiber size, aerodynamic characteristics, and physical appearance.
b. The health hazards of asbestos, including the nature of asbestos-related diseases, routes of exposure, dose-response relationships, synergism between cigarette smoking and asbestos exposure latency period of diseases, and health basis for the standards.
c. Typical locations, uses, and types of ACM; and recognition of damage, deterioration, and delamination of ACM.
d. Employee personal protective equipment, including the types and characteristics of respirators limitations of respirators; proper selection, inspection, donning use, maintenance and storage procedure for respirators; methods for field testing of the face-piece-to-face seal (positive and negative-pressure fice-tests); qualitative and quantitative fit test procedures; variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage, and handling of non-disposable clothing; and regulations covering personal protection equipment.
e. Air monitoring procedures and requirements included under OSHA 29 CFR 1926.1101, a amended, and any subsequent amendments and editions, including a description of equipment and methods, reasons for air monitoring, types of samples, and current standards with proposed changes.
f. Description of the proper methods of handling RACM to include state-of-the-art work practice for asbestos operation and maintenanceO&M activities including: purpose, proper construction, and maintenance of barriers; posting of warning signs; electrical and ventilation system lockout/tagout-proper working techniques for minimizing fiber release; use of wet methods and surfactants; use of HEPA vacuums; and proper cleanup and disposal procedures. Work practice requirements as they apply to removal, encapsulation, enclosure, and repair shall be discussed individually.
2. A yearly review course shall be one day in length and shall; review the health hazards associated with exposure to asbestos, the locations, uses, types, and condition of ACM, hands-on activities, updated information on state-of-the-art procedures and equipment, and review regulatory changes and interpretations. Actual instruction time shall be a minimum of six and one-half hours. The Department may request coverage of specific topics.
3. The requirements of this Section XV of this regulation pertaining to course presentation effectiveness of training, foreign-language instruction, testing, certificates, notification and reporting record keeping, qualifications for instructors, course approval, and periodic audits shall apply to O-&-N

courses.

<b><u>PE. Qualifications for Instructors of Non-Work Practice Topics.</u></b>
1. Applicants seeking approval to teach segments of asbestos training courses other than work practice or hands-on exercises shall be actively working in the field of expertise for which he or she is conducting training.
2. The following documentation is required for instructors of non-work practice topics:
a. A Ccopy of a high school, General Education Development (GED), or college/university diploma;
b. A Ccopy of all professional licenses relevant to the subject matter being taught; and
c. The name, address, and telephone number of the applicant's current employer.
<b>EF.</b> Initial and Refresher Course Instructor Qualifications.
The Department reserves the right to reject instructor training and/or experience that it deems unacceptable for qualification.
1. Worker Discipline.
a. Previous Training.
The applicant shall meet current EPA and Department accreditation requirements for supervisors; and.
b. Education/Asbestos Work Experience.
The applicant shall meet at least one of the following education/asbestos work experience combinations:
(1) If the applicant does not possess either a GED or high school diploma, the applicant
(a) Have at least 360 instructional hours as an instructor in an EPA-approved worker course; and
(b) Have at least 1,440 hours experience in a worker or supervisory capacity of contained work areas.
(2) If the applicant possesses either a high school or GED diploma, the applicant shall:
(a) Have at least 960 hours of documented experience in a worker, supervisory, or consulting capacity of contained work areas; or
(b) Have at least 240 documented hours as an instructor in an asbestos worker or
supervisor course.
(c) The applicant may substitute 240 documented hours of occupational safety, health, and environmental instructional hours taught in courses required to meet federal or sState

regulations for the instructional hours required in Partparagraph EF.1.b.(2)(b) of this Section.
(3) If the applicant possesses at least an associate degree from a regionally-accredited college/university, the applicant shall:
(a) Have at least 480 hours of documented experience in a worker, supervisory, or consulting capacity of contained work areas; or
(b) Have at least 120 documented hours as an instructor in an asbestos worker or supervisor course.
(c) The applicant may substitute 120 documented hours of occupational safety, health, and environmental instruction taught in courses required to meet federal or sState regulations for the instructional hours required in Part paragraph EF.1.b.(3)(b) of this Section.
2. Supervisor Discipline.
a. Previous Training.
The applicant shall meet current EPA accreditation requirements for Supervisor; and.
b. Education Asbestos Work Experience.
The applicant shall meet at least one of the following education/asbestos work experience combinations:
(1) If the applicant does not possess either a high school or GED diploma, the applicant shall:
(a) Have at least 360 documented hours as an instructor in an EPA-approved supervisor course; and
(b) Have at least 1,440 hours of documented experience in a supervisory capacity of contained work areas.
(2) If the applicant possesses either a high school or GED diploma, the applicant shall:
(a) Have at least 960 hours of documented experience in a supervisory capacity of contained work areas; or
(b) Have at least 240 documented hours as an instructor in an asbestos worker or supervisor course.
(c) The applicant may substitute 240 documented hours of occupational safety, health, and environmental instruction taught in courses required to meet federal or setate regulations for the instructional hours required in Part paragraph EF.2.b.(2)(b) of this Section.
(3) If the applicant possesses at least an associate degree from a regionally-accredited college/university, the applicant shall:
(a) Have at least 480 hours experience in a worker, supervisory or consulting



4. Building Inspector Discipline.
a. Previous Training.
The applicant shall meet current EPA accreditation requirements for asbestos building inspectors: and
b. Education/Asbestos Work Experience.
The applicants shall meet at least one of the following education/asbestos work experience combinations:
(1) If the applicant possesses either a high school or GED diploma, the applicant shall:
(a) Have documented experience including asbestos inspections in at least one million square feet of building space in the last three years; or
(b) Have at least 60 documented hours as an instructor in an EPA-approved building inspector course.
(c) The applicant may substitute 60 documented hours of occupational safety, health, and environmental instruction taught in courses required to meet federal or sState regulations for the instructional hours required in Partparagraph EF.4.b.(1)(b) of this Section.
(2) If the applicant possesses at least an associate degree from a regionally-accredited college/university, the applicant shall:
(a) Have documented experience including asbestos inspections in at least 500,000 square feet of building space in the last three years; or
(b) Have at least 40 documented hours as an instructor in an EPA-approved building inspector course.
(c) The applicant may substitute 40 documented hours of occupational safety, health, and environmental instruction taught in courses required to meet federal or setate regulations for the instructional hours required in Partparagraph EF.4.b.(2)(b) of this Section.
5. Project Designer Discipline.
a. Previous Training.
The applicant shall meet current EPA accreditation requirements for asbestos project designers; and
b. Education/Asbestos Work Experience.
The applicants shall meet at least one of the following education/asbestos work experience combinations:
(1) If the applicant possesses either a high school or GED diploma, the applicant shall:
(a) Have documented asbestos project design experience including the design of

at least 12 asbestos projects in the last three years; or
(b) Have at least 30 documented hours as an instructor in an EPA-approved asbestos project designer course.
(c) The applicant may substitute completion of 30 documented hours of occupational safety, health, and environmental instruction taught in courses required to meet federal or sState regulations for the instructional hours required in Part paragraph EF.5.b.(1)(b) of this Section.
(2) If the applicant possesses at least an associate degree from a regionally-accredited college/university, the applicant shall:
(a) Have documented asbestos project design experience including the design of at least six asbestos projects in the last three years; or
(b) Have at least 20 documented hours as an instructor in an EPA-approved asbestos project designer course.
(c) The applicant may substitute 20 documented hours of occupational safety, health, and environmental instruction taught in courses required to meet federal or sState regulations for the instructional hours required in Partparagraph EF.5.b.(2)(b) of this Section.
FG. Documentation of Instructor Qualifications.
1. Applicants seeking approval to teach work-practice or hands-on topics or to act as a sole instructor shall submit documentation of training, education, and work experience as required herein.
2. Documentation of Training.
a. The applicant shall submit a copy of initial and subsequent refresher certificates of training from courses approved by the EPA or by an EPA-accredited state, and provide for each course the title, dates of instruction, names of instructors, name, address, and telephone number of the training provider.
b. Instructors shall take refresher training from a non-affiliated (not affiliated with the instructor) training provider not affiliated with the instructor for at least one discipline every other year. Instructors teaching multiple disciplines shall alternate among the different disciplines taught.
3. Documentation of Education.
The applicant shall submit a copy of high school, GED, or college or university diploma or the name and address of the conferring institution.
4. Documentation of Asbestos Work Experience.
a. An applicant for instructor of worker or supervisor training courses shall submit a detailed description of job duties and responsibilities as an asbestos worker, foreman, supervisor, or consultant, including all of the following:
(1) Inclusive dates of employment;
(2) The name of the employer:

(3) Types of asbestos-containing materials ACM removed;
(4) Number of workers supervised;
(5) Name, address, and telephone number of each different employer; and
(6) Name of immediate supervisor at each different employer.
b. An applicant for instructor of building inspector, management planner, or project designer training courses shall include all relevant information concerning experience completing inspections, management plans, or project designs, including all of the following:
(1) Size and location of buildings inspected;
(2) Descriptions of management plans, projects managed, or projects designed;
(3) Name, address, and telephone numbers of building owners;
(4) Name, address, and telephone numbers of all employers; and
(5) Inclusive dates of employment.
c. Documentation of Instructor Experience.
The applicant shall submit a detailed description of instructor experience, including all of the following:
(1) Name of training courses taught;
(2) Topics taught for each course;
(3) Inclusive dates of each training course;
(4) Total hours taught for each training course; and
(5) Name, address, and telephone number of each training organization with which experience is claimed.
GH. Work Practice Topics.
Instructors shall meet the qualifications for instructors listed in Section EXIX. F. above in order to teach the following asbestos Work Practice Topics:
1. Operations and Maintenance O&M Workers and Worker Refresher:
a. State-of-the-Art Work Practices.
b. Hands-on Exercises (initial course only).
2. Workers and Worker Refresher:

a. State-of-the-Art Work Practices.
b. Hands-on Exercises (initial course only).
3. Supervisors and Supervisor Refresher:
a. State-of-the-Art Work Practices.
b. Techniques for Asbestos Abatement Activities.
c. Hands-on Exercises (initial course only).
4. Management Planners and Management Planner Refresher:
a. Evaluation/Interpretation of Survey Results.
b. Hazard Assessment.
c. Developing an Operations and Maintenance (O&M) Plan.
d. Record Keeping for the Management Planner.
e. Assembling and Submitting the Management Plan.
5. Building Inspectors and Building Inspector Refresher:
a. Pre-inspection Planning and Review of Previous Inspection Records.
b. Inspecting for Friable and Non-friable Asbestos Containing Materials (ACM).
c. Assessing the Condition of Friable ACM.
d. Bulk Sampling/Documentation of Asbestos in Schools.
e. Record Keeping and Writing Inspections Reports.
f. Field Trip.
f. Field Trip.  6. Project Designers and Asbestos Project Designer Refresher:
6. Project Designers and Asbestos Project Designer Refresher:
6. Project Designers and Asbestos Project Designer Refresher:  a. Safety System Design Specifications.
6. Project Designers and Asbestos Project Designer Refresher:  a. Safety System Design Specifications.  b. Designing Abatement Solutions.
6. Project Designers and Asbestos Project Designer Refresher:  a. Safety System Design Specifications.  b. Designing Abatement Solutions.  c. Budgeting/Cost Estimation.

g. Field Trip. **HI.** Course Approval. 1. The Department may base approval of an initial or refresher training course in any discipline in whole or in part on the provider's compliance with the requirements of Section XV.B.XIX.C., the accuracy and applicability of the materials submitted pursuant to this Section, observation by a Department representative of an actual presentation of the course, or approval from the EPA, an EPAaccredited state, or a state which hashaving reciprocity with the Department. 2. The training provider shall submit all of the following information to the Department not less than 30 days prior to the initial presentation of the course within the State: a. Course sponsor's name, address, and telephone number. b. The course curriculum. c. Length of training in days. d. Description of amount and type of hands-on training. e. Topics covered in the course. f. A copy of all course materials, including student manuals, student handouts, instructor notebooks, lecture outlines, etc. g. A detailed statement regarding the length, format, and development of examinations, and copies of actual examinations. h. A description of procedures used to administer examinations and to ensure their security. i. Instructor names, documentation of qualifications, and (including resumes), and the subject areas that each instructor will teach. j. Description and samples of numbered certificates that will be issued to students who successfully complete the course, and a statement regarding how the manner in which certificate numbers are generated. k. Other applicable information requested by the Department. 1. A statement as to the course audience (in-house, contract, or public subscription). m. Other applicable information requested by the Department. 3. The provider of any training course presented in the State shall allow Department representatives to attend, monitor, and evaluate the course without charge and without advance notice.

approval.

4. The provider of any training course approved by the Department shall notify the Department within ten days of any changes in course topics, materials, and instructors. The training provider shall notify provide notification in writing and shall submit appropriate documentation for Department

5. The Department reserves the right to require additional training as appropriate, including training specific to this regulation, air sampling strategies, or roofing projects.
6. The Department shall withdraw approval of a training course if it determines that:
a. The course no longer meets the requirements of this regulation or the EPA Model Accreditation Plan.
b. Approval from the EPA, an EPA-accredited state, or a state with whom the Department has reciprocity has been withdrawn.
IJ. Periodic Audits.
1. The Department may conduct unannounced audits of any training course to ensure compliance with all requirements of this regulation.
2. All in-State training providers shall maintain the approval status of their training courses by submitting to periodic on-site audits by the Department. Such audits may be unannounced. In-State training courses which that have been audited by a state which has having a written reciprocal agreement with the Department regarding periodic audits may be exempted from the periodic audit rule.
3. The Department shall conduct periodic audits for the purpose of verifying that the training course in in compliance with the following:
a. The training course complies with Aall requirements of this regulation;
b. The training course content has been updated and is current with state-of-the-art methods and technology available in the asbestos abatement and management industry;
c. The training course meets instructor qualifications and performance standards, training course administration standards, hands-on training standards, and instructor-to-student and workstation-to-student ratios as established by the Department;
d. The training course sponsor has maintained training-related records as required in Part paragraph BC.9. of this Section-; and
e. Previously approved curriculum materials and instructors are subject to the training course standards as defined by the Department.
4. All training course sponsors shall allow, at no charge, representatives from the Department to attend all or any part of any training course for the purpose of conducting periodic audits. Training course sponsors shall not restrict access to any part of a training course for which the Department is conducting an on-site audit. As part of the audit process, training course sponsors shall make records as defined in Section XV of that are required by this regulation available to the Department upon request.
5. As a result of a periodic on-site audit of any training course previously approved by the Department, the Department may revoke or suspend its approval; or, for training courses which that have been approved by other federal or state approval agencies, the Department may refuse to accept certificates of training, if any of the following deficiencies are noted during the audit:
a. The course is not in compliance with Section XV.B. of this regulation;

b. The training provider misrepresents the extent of the training course's approval; or c. The Department finds evidence of falsification of any records required in Section XV.B.9. of by this regulation. 6. The Department shall not recognize a certificate of training issued by any in-State training course that has had its acceptance suspended or revoked as the a result of an on-site audit until a subsequent audit shows that the cause of suspension or revocation has been corrected. 7. The Department shall not recognize a certificate of training issued by any training course that has had its approval, acceptance, or certification revoked by any other state or federal approval agency until the approval has been re instated reinstated by the revoking agency. SECTION XIX.K., formerly SECTION III.D.7., has been moved and revised as follows: 7K. Asbestos Training Course License Fees Schedule. a. Fee Schedule (1). Initial audit approval for each training course license - \$350.00 per day per course. (2). Annual license renewal for Department-approved training courses - \$200.00 per course. b3. Each course license is valid for an entire year, regardless of the number of times the course is taught during the year. e4. Fees shall not be refunded if a training course is denied a license per Section III.F. of this regulation. 45. Failure to pay annual training course license renewal fees may, after a hearing in accordance with the provisions of Section XVIII of this regulation, result in the course license being revoked. SECTION XX., formerly known as SECTION XVI., has been moved and revised as follows: OTHER REQUIREMENTS INDUSTRIAL MANUFACTURING AND SECTION XX. ELECTRICAL GENERATING FACILITIES. A. Applicability. 1. In lieu of requirements described in other sections of this regulation except as specified herein, the requirements of this sSection shall apply to the owner of an industrial manufacturing or electrical generating facility that has obtained a group license for facility employees or employees of the designated long-term in-house contractor. 2. There are no size limits for Unless otherwise specified herein, the applicable requirements of this regulation shall apply to any asbestos projects involving RACM for which the applicable requirements of this regulation shall not apply, unless otherwise specified herein, regardless of the size of the project. 3. Section I. Definitions shall apply. 43. No person shall engage in any asbestos project or abatement involving regulated asbestos

containing material RACM unless licensed to do so by the Department.

54. Industries that choose not to obtain a facility group license, or who hire companies or individuals not covered under the facility group license shall satisfy the all applicable requirements described in other sections of this regulation.

# B. Training.

Employees of industrial manufacturing or electrical generating facilities and of such facilities' long-term in-house contractors who perform asbestos abatement projects shall satisfy the training requirements as specified below:

- 1. Employees who perform OSHA-designated Class I<sub>7</sub> and II or III—work not subject to OSHA's exceptions shall receive training consistent in length and curriculum with 40 CFR Part 763, Subpart E, Appendix C, as amended, and any subsequent amendments and editions. Roofing workers and supervisors Employees who perform OSHA designated Class III work not subject to OSHA's exceptions shall receive training consistent in length and curriculum with Section XI.I. 40 CFR 763.92(a)(2).
- 2. All training conducted for the purpose of satisfying B.1 of this Section shall be conducted by a person who meets the applicable instructor qualifications of the Training Section of this regulation.

# C. License Application.

- 1. Each person covered under a facility Ggroup license shall successfully complete a Department-approved initial or refresher training course specific to the discipline, and at the conclusion of the course, shall successfully pass an examination, when applicable, with a score of 70 percent or above.
- 2. Each facility seeking a Gyroup license shall submit a completed application to the Department in a format designated by the Department. The application must state the type of license for which the application is being made and must include the following information:
- a. Name, mailing address, and street address of the industrial manufacturing or electrical generating facility.
  - b. Name, title, and telephone number of a responsible company official.
    - c. Name of the designated long-term in-house contractor, when applicable.
- d. Name, social security number, discipline, training provider or approved instructor, and, when applicable, examination date of most recent training certificate for each person to be included under the license.
- e. An owner shall notify the Department quarterly of any change in facility name, contact person, mailing address, street address, or telephone number, and any change in the long-term in-house contractor, and/or changes in personnel covered by the Group license.
- 3. Acceptable documentation of training may be requested by the Department and shall include:
- a. An original certificate which is issued by the training course provider and which that meets the requirements specified in Section XV.B.7.b. of this regulation; or

b. A valid, original license or accreditation issued by a state which that has a reciprocal arrangement with the Department. (Pphotocopies or telephone facsimile copies shall not be accepted); or
c. A letter verifying successful completion of training which that is sent directly to the Department from the approved training instructor.
4. Duration of a License.
a. A license shall automatically become invalid if an instrument of payment is returned for insufficient funds.
b. A Group license shall expire one year from the process date, unless the Department suspends or revokes the license at an earlier date. No person covered by a Group license shall engage in any asbestos project after one year from the examination date printed on his or her most recent training certificate regardless of the expiration date of the Group license.
D. Continuing Education
1. After successful completion of an approved initial training course, each employee to be covered under a Group license shall thereafter successfully complete a Department-approved initial or refresher training course specific to the discipline, and, at the conclusion of each course shall pass an examination with a score of 70 percent or above where applicable.
2. If more than 12 months but fewer than 24 months have elapsed since completing an initial or refresher training course, an applicant shall successfully complete either a refresher training course or an initial training course.
3. If more than 24 months have elapsed since successfully completing an initial or refresher training course, an applicant shall complete another initial training course.
E. Fees.
1. No application will be processed unless accompanied by the required fee.
2. Departmental receipt and deposit of fees submitted with an application shall in no way indicate approval of the application or guarantee the Department's issuance of a license.
3. Fees may shall not be refunded if a license is denied.
F. Group License Fee Schedule.
The fee for a group license shall be as follows:
1. uUp to 10 people - \$ 25.00 minimum fee
2. 11 to 20 people - \$ 2.50 per person
3. 21 to 50 people - \$ 5.00 per person
4. 51 to 90 people - \$ 7.50 per person

- 5. 91 persons or more \$ 500.00 maximum fee
- 6. The minimum fee for a Group license is \$25.00 and the maximum is \$500.00.

#### G. Project Fees.

- 1. The Department shall collect project license fees for all regulated asbestos containing materials RACM being removed, and for previously non-regulated asbestos containing materials ACM rendered regulated by use of destructive removal techniques such as chipping, grinding, sawing, abrading, drilling, or extensive breaking.
- 2. Abatement project fees for regulated asbestos containing materials (RACM) are calculated at 10 cents per linear, cubic, or square foot, with a minimum fee of \$25.00 and a maximum fee of \$1,000.00. For RACM off the facility component such that the area or length cannot be measured prior to abatement, a minimum fee of \$25.00 will be assessed.
- 3. The Department will not issue an abatement project license for a renovation or demolition until all requested information has been submitted and reviewed, and all applicable fees have been paid.
- 4. Fees will not be refunded on projects for which the Department has issued an asbestos project license.
- 5. An abatement project license, which that has been issued shall automatically become invalid if an instrument of payment is returned for insufficient funds.

# H. Action on an Application.

Within 15 calendar days after receiving an application, the Department will acknowledge receipt of the application and notify the applicant of any deficiency in the application. Within 30 calendar days after receiving a completed application, including all additional information requested, the Department will issue a license or deny issuance of the license application.

I. Denial. The requirements of Section III.F. shall apply.

#### JI. Conditions and Generic Alternatives.

In granting a license, the Department may impose reasonable terms and conditions to ensure continuous compliance with the requirements of this regulation.

# **KJ**. Asbestos Project General Information.

- 1. Prior to beginning a renovation or demolition operation at a regulated facility, the owner/operator shall ensure that a building inspection is performed to identify the presence, location, and estimated quantity of ACM which that may be disturbed by the work activity. The building inspection shall be performed by a person licensed as a building inspector or management planner.
- 2. The building inspector or management planner shall:comply with the Building Inspection Section of this regulation.
- a. Follow procedures specified in 40 CFR 763.86 as amended, and any subsequent amendments and editions, in determining sampling locations and the number of representative samples to be collected.

Samples shall be collected from friable and non-friable suspect ACM on affected interior and/or exterior facility components.
b. Prepare a detailed report based on findings of the inspection to include the information required in 40 CFR 763.85 (a)(4)(vi)(A) (E) as amended, and any subsequent amendments and editions. Also include a description of non suspect materials excluding: glass, metals, kiln brick, cement, fiberglass, concrete, pressed wood, cinder block, and rubber.
c. Provide an assessment of all materials suspected to contain asbestos, including an evaluation of the materials' current condition, estimated quantities and potential for disturbance.
d. Include name, license number, date of inspection, and signature of the licensed building inspector or management planner who performed the inspection and completed the report.
e. Ensure that bulk samples are analyzed in accordance with requirements specified in 40 CFR 763.87 as amended and any subsequent amendments and editions and this regulation. Any laboratory that retains proficiency as demonstrated by successful participation in a nationally recognized testing program may be acceptable.
LK. Notification.
1. For NESHAP renovation projects, refer to Section V.B. the NESHAP Project Section of this regulation.
2. For demolitions, refer to Section XIII the Demolition Section of this regulation.
3. For small, minor, and operation and maintenance O&M renovation projects, either:
a. Provide the Department with written notification/application prior to any abatement and pay all applicable fees.
(1) Deliver the notification by U.S. Postal Service or commercial delivery service, facsimile transmission, by hand or by other methods deemed acceptable to by the Department.
(2) Postmark or deliver the notice at least five calendar four working days for small projects before commencing asbestos stripping or removal work or any other activity begins that would break up, dislodge, or similarly disturb regulated asbestos containing material RACM. For minor and operation and maintenance O&M projects, postmark or deliver the notice prior to commencing abatement activities.
(3) Update the notification when any previously notified information changes and pay additional project fees as necessary.
(4) Notify the Department by telephone and follow up in writing as soon as possible, but no later than, the originally notified start date when a project for which notification was sent has been canceled.
(5) The Department may waive the five-calendar-day prior notice requirement on a case-by-case basis;

- b. Maintain a log of all small, minor, or operation and maintenance O&M projects performed during a quarter, report them to the Department within 30 calendar days of the end of the quarter, and pay applicable project fees. The log shall include but is not limited to: the name and address of the facility being abated, amount and type of asbestos containing material ACM removed, date(s) of the removal, names of individuals who performed the abatement, the temporary waste storage location, and the name of the landfill used for disposal.
- 4. The owner/operator shall notify the Department by telephone and follow up in writing as soon as possible before, but not later than, the notified start date when a project has been canceled.
- 5. A licensed asbestos project designer shall prepare and implement the written design for each abatement renovation project involving the removal of greater than 3,000 square, 1,500 linear, or 656 cubic feet of RACM in a facility to be reoccupied. However, all projects shall be designed in accordance with the requirements of 40 CFR 763.90(g), as amended, and any subsequent amendments and editions, and this regulation.
- 6. The disposal requirements of this regulation shall be applicable to asbestos-containing and asbestos-contaminated materials for any abatement activity.

### **ML**. Emergency Operation Documentation.

- 1. For an emergency operation, the owner/operator shall submit project notification as early as possible before, but not later than, the working day following the emergency operation.
- 2. The facility owner shall notify the Department in writing of the date and hour that the emergency occurred; a description of the sudden, unexpected event; and an explanation of how the event caused an unsafe condition, public safety or health threat, equipment damage, or would impose an unreasonable financial burden. The owner shall submit this information with the project notification as required in this sSection-M.1. above.

#### NM. Work Practices.

- 1. NESHAP projects performed, at an industrial manufacturing or electrical generating facility, by individuals covered under the facilitiey's group license shall satisfy the work practice requirements of 40 CFR 61.145, as amended, and any subsequent amendments and editions, and shall ensure that: wet removal methods are used; no visible emissions are released to the outside air; and all asbestos waste is sealed in leak-tight containers and disposed of at a landfill permitted to accept asbestos waste.
- 2. Any small or minor asbestos project, or any operation and maintenance O&M activity performed at an industrial manufacturing or electrical generating facility shall be subject to the work practice requirements of Sections VI., VII., and VIII. the Small Project, Minor Project, or O&M Project Sections whenever feasible. When such work practice requirements are not feasible, the owner/operator shall perform work in such a way to provide assurance of RACM containment.
- 3. The owner/operator shall ensure that contaminated water is filtered through a five micron or smaller filter, and discharged to a sanitary sewer system. No contaminated or filtered water shall be allowed to leak or drain outside of the work area.
- 4. The Department may, on a case-by-case basis, approve alternative procedures for work practices, control of emissions from an asbestos abatement project, or air monitoring, provided the owner/operator submits a written description of the alternative procedure to the Department prior to beginning work and

demonstrates to the satisfaction of the Department that compliance with the prescribed procedures will not be practical or feasible and that the proposed alternative procedures provide equivalent protection from asbestos exposure.

5. Legible copies of Departmental letters of approval for alternative work practices shall be kept at the project site and available for inspection for the duration of abatement.

# ON. Exemption from Wetting for Any Sized Project.

The requirements of the Exemption From Wetting Section IV.G. of this regulation shall apply.

# PO. Disposal.

The requirements of the Disposal Section IV.H. of this regulation shall apply except as follows:

- 1. In lieu of locking metal dumpster doors and tops—as required by IV.H.1.d.(7), the dumpster containing asbestos waste may be kept in a secured area to which access is controlled.
- 2. Asbestos waste may be kept at the site until a sufficient quantity has accumulated for a full shipment. In this instance, in lieu of the requirements of IV.H.2.g., the facility owner shall submit a copy of a completed waste shipment record or other shipping manifest to the Department within 45 working days of shipment of the waste.

### **QP.** Requirements for Training Courses and Training Instructors.

- 1. In order for initial or refresher training subject to the requirements of 40 CFR Part 763 Tto be acceptable as a basis for licensing pursuant to this sSection, initial or refresher training which are subject to 40 CFR 763 shall require the course curriculum and instructors must meet the applicable curriculum criteria in the Training Section XV. of this regulation and shall be approved by the Department.
- 2. Roofing course curriculum shall meet the requirements of Section XI, and instructors shall meet the applicable requirements and qualifications as specified in Section XV of this regulation.
- RQ. The requirements of the Reprimands, Suspensions, and Revocation. The requirements of Section XVII of this regulation shall apply.
- SR. The requirements of the Contested Cases The requirements of Section XVIII of this regulation shall apply.
- TS. The requirements of the Records The requirements of Section XIX of this regulation shall apply.
- UT. The requirements of the Other Requirements The requirements of Section XX of this regulation shall apply.

SECTION XXI., formerly known as SECTION XVII., has been moved and revised as follows:

# SECTION XXI. REPRIMANDS, SUSPENSIONS AND REVOCATION.

The Department may reprimand any licensee or revoke or suspend any license based upon violation of any requirement stated herein. Reasons for reprimand, suspension, or revocation may include, but are not

limited to, falsification or known omission of any written submittal required as part of this regulation, submission of fraudulent information or documentation, omission or improper use of work practices, improper disposal of ACM, or spread of asbestos emissions beyond the containment area.

SECTION XXII., formerly known as SECTION XVIII., has been moved and revised as follows:

# SECTION XXII. CONTESTED CASES

Any action taken by the Department pursuant to this regulation or enabling statutes, including, but not limited to permit denial, suspension, revocation or issuance of any civil penalty, may be subject to a contested case hearing. Any party desiring a contested case hearing pursuant to South Carolina Department of Health and Environmental Control Regulation 61-72, Procedures for Contested Cases, and the South Carolina Administrative Procedures Act, S.C. Code Section 1-23-10 et seq., shall have 15 days from the date of the decision to address such a request to:

# Clerk of the Board South Carolina Department of Health and Environmental Control 2600 Bull Street Columbia, South Carolina 29201

A. A Department decision involving the issuance, denial, renewal, suspension, or revocation of a permit or license may be appealed by an affected person with standing pursuant to applicable law, including S.C. Code Title 44, Chapter 1 and Title 1, Chapter 23.

B. Any person to whom an order or civil penalty is issued may appeal it pursuant to applicable law, including S.C. Code Title 44, Chapter 1 and Title 1, Chapter 23.

SECTION XXIII., formerly known as SECTION XIX., has been moved and revised as follows:

#### SECTION XXIII. RECORDS.

Each licensed asbestos owner/operator shall retain, for at least three years after their issuance, all records required herein unless otherwise stated. These records shall be made available to the Department for review toby the Department upon request.

SECTION XXIV., formerly SECTION XX., has been moved and revised as follows:

# SECTION XXIV. OTHER REQUIREMENTS.

A. The requirements of this regulation shall in no way be construed to relieve the owner/operator from compliance with other regulatory requirements or contractual agreements which that may be more restrictive.

B. The Department reserves the right to assess additional fees for licensing, training course auditing, and abatement activities, should enabling legislation be enacted.

SECTION XXV., formerly SECTION XXI., has been moved and revised as follows:

# SECTION XXV. SEVERABILITY CLAUSE.

The provisions of Sections I through XXIV of this regulation must be construed as separate provisions. If a provision is judged to be invalid in a court of law of this State, the court's decree shall apply only to the provision and action specified and shall have no effect on any other provision unless stated in the court's decree. The invalidity does not affect other provisions or applications of the Section which may be given effect without invalid provision or application and pursuant to this requirement, the provisions of these Sections are severable.